

THE

Desert

M A G A Z I N E

FEBRUARY, 1939

25 CENTS



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597 State Street

THE *Desert*
MAGAZINE

El Centro, California

FEBRUARY

Calendar

Civic groups in the desert area are invited to use this column for announcing fairs, rodeos, conventions and other events which have more than local interest. Copy must reach the Desert Magazine by the 5th of the month preceding publication. There is no charge for these announcements.

- JAN. 28—Annual meeting of Imperial Highway Ass'n at Elsinore, California. Election of officers.
- JAN. 29, 30—Third annual rodeo at Palm Springs, California.
- JAN. 29, 30—Rodeo at Casa Grande, Arizona.
- JAN. 31-FEB. 1 — Arizona Cattle Growers Ass'n meets at Safford, Arizona.
- FEB. 1-14 — Exhibit of paintings by John Hilton and etchings by Henry De Kruif at Desert Inn Art gallery at Palm Springs, California.
- FEB. 3, 4, 5—Riverside county fair and Coachella Valley Date festival at Indio, California. Horse show the 3rd, parade the 4th, annual stampede 4th and 5th.
- FEB. 3, 4, 5—First annual Spanish Fiesta at Douglas, Arizona.
- FEB. 5—Lucius G. Folsom to speak on "The Land of Ten Thousand Smokes" at Southwest Museum, Los Angeles, 3 p. m., no charge.
- FEB. 9-12—Junior chamber of commerce rodeo at Phoenix, Arizona.
- FEB. 11 — Nevada State Press association to hold annual convention at Reno.
- FEB. 12—Dedication of Desert Botanical Garden of Arizona in Papago park, Phoenix. Sponsored by Arizona Cactus and Native Flora society, Mrs. Gertrude D. Webster, president.
- FEB. 12—Francis H. Elmore to lecture on "Indians of the Southwest and Their Ceremonials" at Southwest Museum, Los Angeles, 3 p. m., no charge.
- FEB. 12-18—Imperial Valley Lettuce and Cantaloupe growers and shippers to hold 10th annual invitational golf tournament at Brawley, California.
- FEB. 12-19—Exhibit at Phoenix Federal Art Center. Selections to be made for display at New York World's fair.
- FEB. 15-28—Memorial exhibit of the art work of Gordon Coutts at Desert Inn Art gallery at Palm Springs, California.
- FEB. 19—Arthur Carthew to lecture on "Some of our National Parks" at Southwest Museum, Los Angeles, 3 p. m., no charge.
- FEB. 19-25 — Painting and sculpture exhibit at University of Nevada at Reno.
- FEB. 21-26—La Fiesta de los Vaqueros at Tucson, Arizona. Includes livestock show and sale 21st to 26th, Indian Day the 23rd, parade the 24th and rodeo 24th to 26th.
- FEB. 24-26—Arizona Association of Social Workers meets at Phoenix, Arizona.
- FEB. 26—J. F. Hoover to lecture on "The Navaho People and Their Land Problem" at Southwest Museum, Los Angeles, 3 p. m., no charge.



Volume 2

FEBRUARY, 1939

Number 4

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RESENTMENT

Photo by W.M. M. PENNINGTON

'Feel' of the Desert

By JOHN STEWART MacCLARY

Young Navajo lips can turn down, and bright brown eyes can flash resentment when the white picture maker advises: "Watch the birdie." Too young for school, too accustomed to open sunlight for even remote interest in the mysteries of artificial lighting, somewhat annoyed by brief confinement within four walls of the studio—these babes of the desert would gain more joy from finding a feather dropped from an eagle in flight.

Don't pity the desert's children. Rather, envy them the lack of sophistication which packs a week's delight into a stick of chewing-gum . . . renders them camera-resentful instead of camera-seeking.



Daz Bah's mother combing her hair with a brush of stiff grass stems. In the corner is the Grandmother of the Trembling Hand at her spinning.

White Man's Magic Heals Daz Bah

When Daz Bah met with an accident there was no medicine man to hold a sing, and so her mother took her to the white man's hospital at Ganado, Arizona. The little Navajo girl was saved by the skill of the Big Doctor and the efficiency of one of science's newest inventions. Her recovery was a triumph for the white man's magic which had a far-reaching effect in the ever-present conflict between the pagan beliefs of the Indians and modern medical science. Mrs. Smith's story will touch your heart—and help you understand better the character of the Navajo.

By MRS. WHITE MOUNTAIN SMITH

THE Navajo Indian Reservation covers 16,000,000 acres of highlands and desert in northern Arizona and New Mexico, and there is no such thing as a newspaper of that tribe. Yet I doubt if there is a hogan hidden away in the deepest canyon that has not heard the story of little Daz Bah Lee

and how she was saved from death by the white man's magic "Iron Lung." Some day perhaps our white minds will fathom the mystery of Navajo magic news spreading!

Until the day when her story was told in every daily newspaper in the land and broadcast over nationwide radio, Daz

Bah was just another bright-eyed seven-year-old Navajo girl who played around the hogan or followed her widowed mother with the flocks near the prehistoric Indian village site at Wide Ruins.

On a perfect autumn day I left the paved highway and wound through piñon covered hills to the hogan of Mabel Lee, mother of my little friend Daz Bah. I had not seen her since she lay imprisoned in the big breathing machine at Ganado but she came to meet me and smiled until every white tooth shone against the smooth darkness of her skin. The family was sitting inside the summer hogan of juniper bowers and Grandmother of the Trembling Hand, making a place for me beside her on a sheepskin, went on with her spinning. Daz Bah's mother continued combing the child's gleaming black hair with a bundle of stiff grass stems. Three generations of Navajo women, happy and busy!

"Daz Bah, I've come to listen to a story I want you to tell me, the story of

what happened before you were made well in the Big Doctor's House." Through an interpreter she said:

"Early in the morning, the day I was hurt, I woke up and heard my mother chopping wood outside." (Daz Bah's father was killed by lightning three years ago.) "Slowly darkness was fading away. Soon my mother would call me to help her milk the goats so we could have warm milk to drink before we took the sheep away to graze. Then my mother came and called, 'Daz Bah, get up,' and I jumped from my sheepskins on the floor, leaving my orphan cousins Yina and Kena asleep. Out at the corral my pet lamb followed me around asking for breakfast. I held the goat's head while my mother milked and when the bucket was full we turned the sheep out to pick around the corral while we ate our breakfast. Yina and her brother Kena helped me herd the sheep because their flock ran with my mother's.

"I Was Scared and Fell"

"'Drink plenty of water before you go,' said my mother. 'It will be evening before you come home with the sheep.' We drank and then took our towels to protect us from sun and blowing sand and started to drive the sheep in the direction our mother said. As we passed the corral Kena walked across a long log that bent and trembled with his weight. Yina and I were afraid but he laughed and Yina ran swiftly across it. When I started I was scared and fell. I clutched at the corral but instead I fell across the log. I felt very much pain but I put my hand to my waist and said nothing. More and more I felt a sharp pain in my side, but we kept driving the sheep. Sometime when the pain was bad it seemed the sky turned dark like night, but I kept walking until we came to the hogan of Asdzani.

"I could not speak as I sat on her hogan floor, but Yina told her all about it. She said, 'You stay here with me and let the others watch the sheep. They can stop for you on their way homeward.' I lay down and everything became unknown to me, but through it all I could dimly hear the tinkling of the bells on the sheep my mother had entrusted to me. Somehow I followed the flock home that night and helped again to milk the goats and put the sheep into the corral away from the coyotes. I would rather bear the pain than tell my mother I was hurt falling over the log. The pain stabbed me and all night long I could not sleep, and all night long the dogs barked trying to tell us a coyote was around the corral. At last the sun came over the hill but I was in too much pain to carry the ashes from last night's fire outside the hogan and scatter them to the north so

no dweller in my mother's hogan would have a cold. It is very bad to have the sun shine on the ashes of a past day. I awakened my mother and while she chopped some wood Kena went out to the corral. He came running back to my sheepskins.

"Daz Bah, the coyote jumped over the fence and killed the little lamb, our pet.' But the pain was so much I could not grieve because my pet was killed. Again the world was dark for me and when I opened my eyes Yina had told the story to my mother who ran across the hills to bring Grandmother of the Trembling Hand to our hogan. My grandmother can tell what is the matter with people by shaking her hand over them."

Grandmother looked at me and smiled while she was being discussed. Spying a pair of sun glasses in my lap she calmly appropriated them and placed them in front of her keen black eyes. Very pleased with the results she grunted and went on spinning. As far as I was concerned the glasses were lost!

"When the sun looked down through the hole in our hogan top my grandmother came and her hand shook as she passed it up and down my body. She looked puzzled and again she raised her hand. How it jerked and trembled as it passed over the pain in my side.

"I know where she is hurt but I can't tell what sort of sing to have for her,' she said. There are different sings for different hurts, just like white doctors give different kinds of medicines for ailments.

Medicine Man is Away

"Gray Singer is far in the mountains singing away a bad dream that Many Goats has had. We cannot ask him, so my daughter, we must send Daz Bah where medicine is made in the White Doctor's Hospital."

"Time passed. I awoke to hear babies crying, many babies. I was not on my sheepskins in my mother's hogan. This must be where grandmother said I should go—the hospital.

"Shi mah, (Mother) when did we come and who brought us here?"

"Be brave. I will not leave you,' was all my mother would say. It seemed as though a great mountain lay on me and I could not lift it to breathe. But every time I closed my eyes a nurse called my name, 'Daz Bah, you must not sleep. Daz Bah, open your eyes, Daz Bah—' I was so tired, if only I could sleep without my name being called. Strange bright lights like little suns shone in the roof above me. Strange people came and went. Medicine men of my own people stood beside me. I was choking.

"My mother never left me. Always she stood beside the high white bed touching

me when I cried. No matter when I opened my eyes she was there." (For almost ten days Daz Bah's mother stood beside the bed or crouched on the floor beside it, leaving the room only when forced to by the nurses.) "She looked tired and sad and yet she smiled when I opened my eyes.

"Mother, I want to sleep, I want to sleep!"

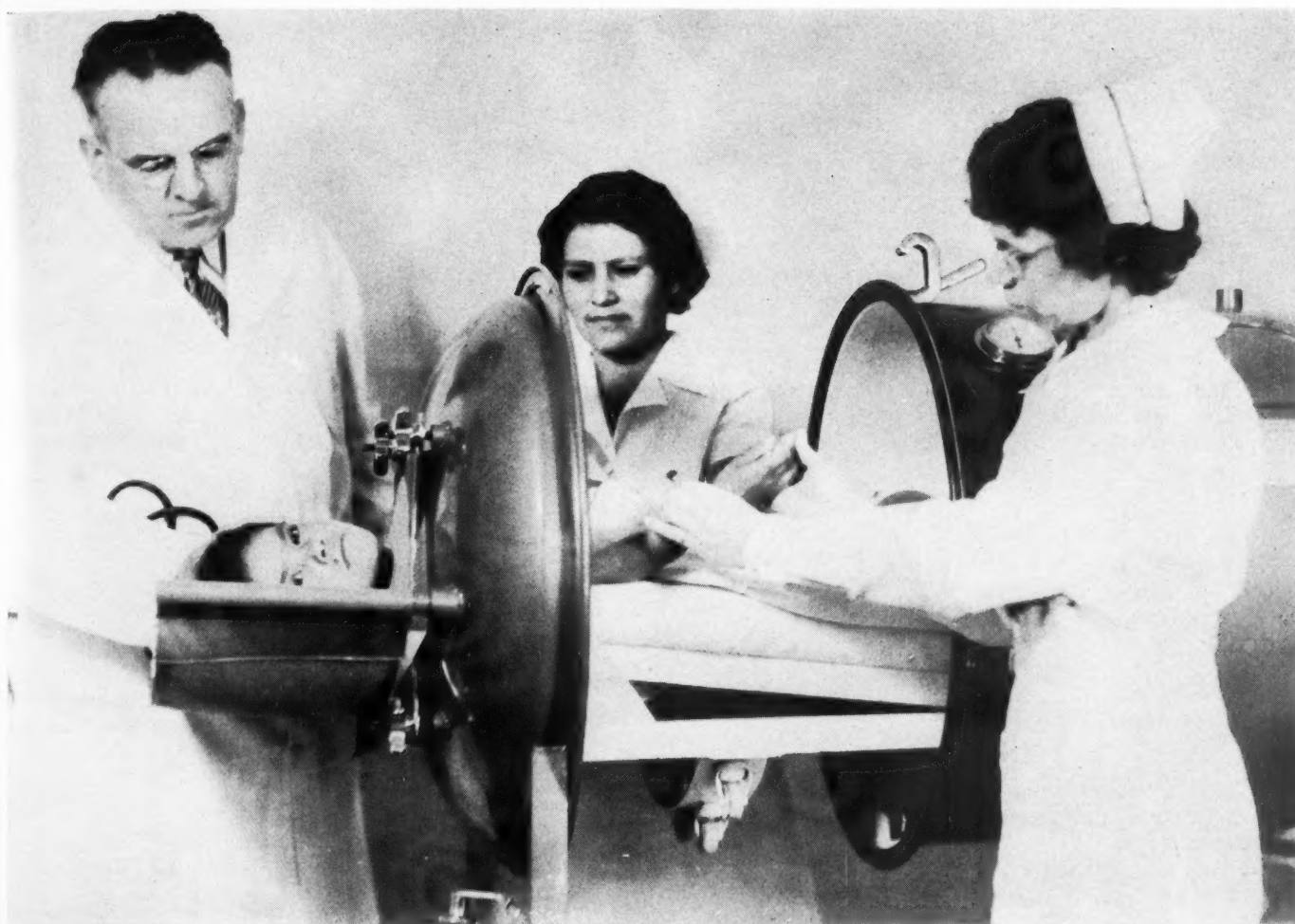
"After a long time the Big Doctor (Dr. C. G. Salisbury) a nurse and a man who spoke my own tongue, came into the room. They moved like people I see in dreams. The Big Doctor talked and then the Navajo talked. He said the white doctor was fixing a box to help me breathe; that they would put me in it and I would stop choking. I was scared when they put me in the box. There was something tight around my neck. I screamed and fought. My mother looked as though her heart hurt but she did nothing and darkness came around me. After a while they found that the box did no good and I must stay awake and fight for air. For seven days and nights I lived like that.

Navajo Mother is Happy Again

"Then a long darkness came. One day I opened my eyes and I was not tired any more. My mother smiled at me and I was in a great iron cage with just my head outside and it rested on a soft pillow. I did not have to draw breath into myself. The machine did that for me. I went to sleep again because my mother looked so happy."

The bright eyed little girl took the string of shining beads I gave her and trotted across to another hogan to display them. She knew nothing of the miracle machine which brought life to her and made her an object of wonder to her tribesmen. I went to Ganado for the rest of the story.

In his sunny office Big Doctor pointed to a huge book of clippings and letters, all having the same subject — a seven-year-old Indian child fighting for life in the "Iron Lung." Something about this little waif in a remote corner of Arizona's highlands brought back to life by one of science's newest and rarest inventions touched the hearts and imaginations of thousands of people. That scrap book held telegrams and letters from doctors and hospitals all over the nation suggesting cures and asking for reports. It had letters to the suffering child from white boys and girls in eastern cities who listened to March of Time tell her story. There were clippings from Chicago, New Orleans, New York and from modest little crossroads towns. One learned article clipped from a Connecticut paper said: "Daz Bah's life has been saved by manual 'perspiration!'" Reporters called



Dr. C. G. Salsbury and two of the nurses at Ganado Mission hospital. Daz Bah is shown in the "Iron Lung" which restored the little Navajo girl to health after all other curatives had failed.

by long distance from Boston for news and Los Angeles sent photographers. One great hearted doctor in Canada shipped by airplane a package of a precious serum he believed would aid the Navajo girl. Flowers came to her room, and dolls ranging from southern black babies to Shirley Temples. And through all the hub-bub the hospital folk continued the quiet fight for life.

We, who live year after year among the Navajo people, know that Sage Memorial Hospital and its superintendent, Dr. Salsbury, are the greatest gift any Church has given to an Indian people. As he sat talking I thought of the hundreds of lives he has saved among the Navajos.

"Every once in awhile in medical work a case comes along and jars one out of the daily routine. I don't know when I've been as stirred as I was when they brought Daz Bah into Sage Memorial," the doctor said. "The nerves of her diaphragm were injured and breathing was no longer involuntary. For seven days and nights that child did not sleep at all. The instant she dozed breathing stopped. Our improvised respirator failed to work and death seemed certain. We knew of the Collins-Drinker Respirator located in Phoenix, which had been presented to

Arizona by the Arizona Grocers' Association. There was a chance, just a chance, the machine could save her. Albert and Golden Farr, two white men who handle heavy trucking on this part of the reservation volunteered to go after the Iron Lung. They made the eight-hundred-mile trip over dangerous mountain roads in 23 hours, stopping only for coffee once or twice. They stayed awake in order that a Navajo Indian child might not die in her sleep. The nationwide praise they received for their act of mercy was well deserved.

"It was two in the afternoon and Daz Bah had been dying since noon. Her small body was worn out with the strain of sleeplessness and pain and we all knew the end was near. Beside the bed her exhausted mother stood with tears streaming down her face. First her husband had been killed by fire from the clouds, and now she must lose her girl child.

"Into the courtyard at the back of the

hospital rolled the heavy truck and eager arms unloaded the seven-hundred-pound breathing machine. There were no frantic screams this time when we lifted the weary child and laid her gently inside the big iron instrument. With the rubber collar arranged around her tiny neck we threw the switch and the work of breathing was taken out of our hands. In less than one minute the girl was sound asleep and twenty-four hours later she still was sleeping. After five days the injured nerves had healed and normal breathing began. The first 'life saved' was chalked up to the credit of the Iron Lung."

With Death in disordered retreat that strange uncanny mental radio which permeates the Navajo reservation began to work. Soon a delegation of strange Medicine Men stalked into the hospital room. They asked questions of Daz Bah's mother; they touched the great green machine and watched the leather bellows rise and fall. They retreated to the corridor and held a closed-session powwow. And then they came back and sprinkled sacred meal and pollen over the breathing monster and threw a little in the six directions for good measure. And then they left. But others came and went through

Continued on page 32

On Manly's Trail to Death Valley

By CHARLES KELLY

"I cut the first three letters
of my name on a rock, and
the date"

SO wrote Henry W. Bigler in his journal under date of November 3, 1849 — nearly 90 years ago. He was camped that day with a pack train in a beautiful little meadow of about 50 acres near the headwaters of a canyon draining toward the Gulf of California. The camp was only three or four miles west of the rim of the Great Basin, yet the creek down which Bigler was traveling already had cut its channel more than a thousand feet deep through a stratum of white pumice and volcanic ash which brilliantly reflected the afternoon sun. The flat little meadow in the canyon bottom was covered with a

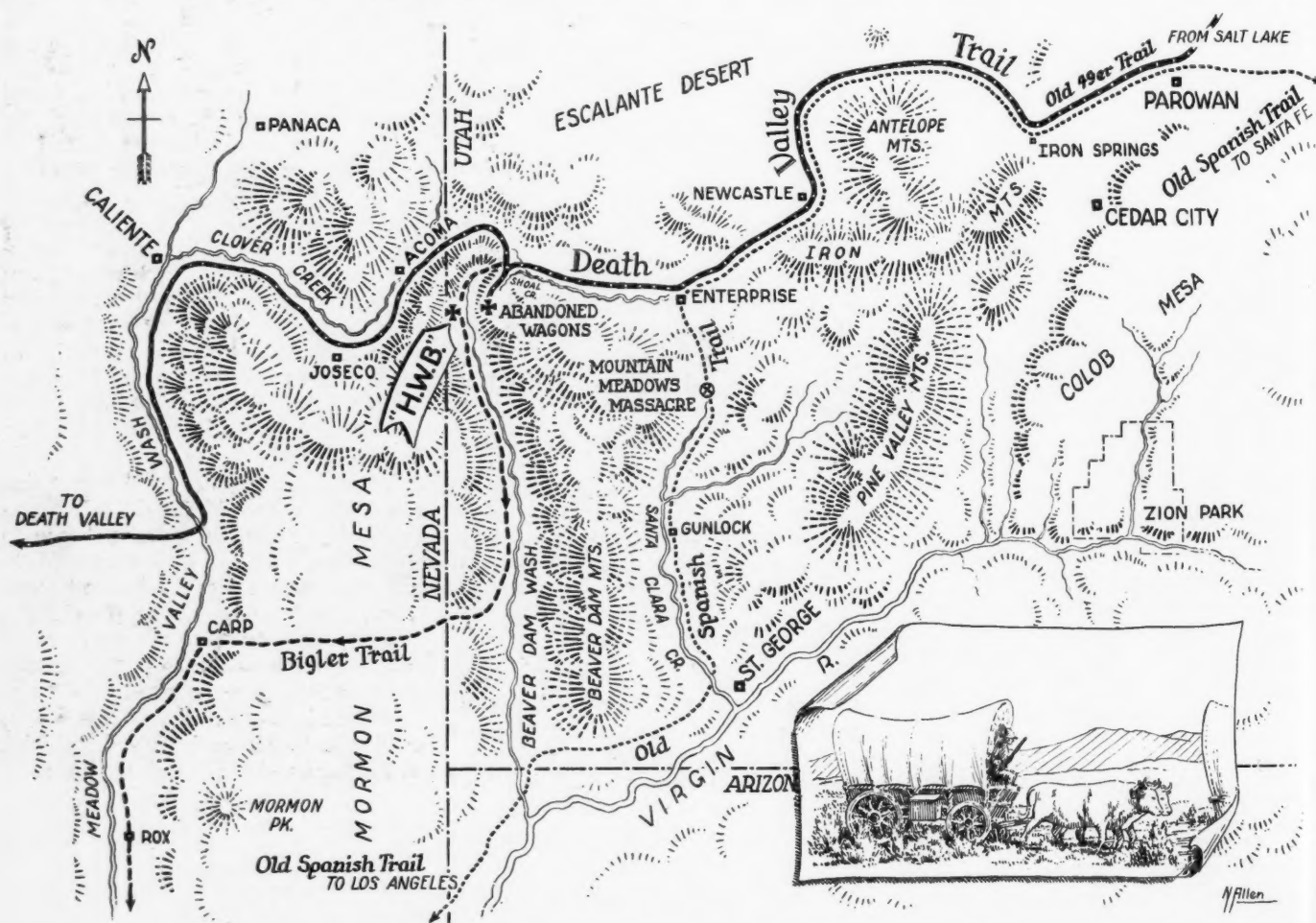
luxuriant growth of desert grasses and furnished the first good feed the pack animals had seen for many a weary day.

Henry W. Bigler, although still a young man, was no stranger to desert travel. As a member of the Mormon Battalion in 1846-47 he had trudged from Fort Leavenworth to Los Angeles, completing one of the longest infantry marches on record. After being discharged in Los Angeles, he had started north with some of his Battalion companions, intending to return immediately to Salt Lake City where Brigham Young had decided to locate. At Sutter's Fort he had stopped to work on the mill being constructed at Coloma by James W. Marshall, and was present at the original discovery of gold, the correct date of which

Charles Kelly is a historian—an outstanding contributor among contemporary writers of western history. And so it was a big day in his life last September when he followed a vague lead down into southwestern Utah and discovered a clue which definitely established the route by which the ill-fated Manly party reached Death Valley in 1849. The discovery was widely publicised in the newspapers at the time, but here for the first time are given the full details of the find—written for Desert Magazine readers by Kelly himself.

momentous occasion he carefully set down in his journal at the time. With a few Mormon companions he dug gold for awhile and then cheerfully obeyed the orders of Brigham Young to gather with the other Saints in "Zion." He had been in the Holy City a few months when he received a call from Brigham to go to the Sandwich Islands as a Mormon missionary.

With Apostle C. C. Rich and a group of other Mormons bound for the mission field, Bigler set out from Salt Lake City in October, 1849. News of the California gold discovery had reached the east in 1848, and already the westward trails were lined with goldseekers. Most travelers took the better known road down



the Humboldt directly to the diggings; but many, reaching Salt Lake City too late in the season to cross the Sierras at Donner Pass, were compelled to seek a southern route open in winter months. The latter included William Manly, author of "Death Valley in '49," the Bennett and Arcane families with whom he traveled, the Jayhawkers, and hundreds of others not mentioned in his account. This large group set out from Salt Lake City in the fall of 1849, and before they had traveled far, were joined by the Bigler missionary party.

Hunt Agrees to Guide Party

At that time no wheeled vehicle had ever passed between Great Salt Lake and the village of Los Angeles, but the gold-seekers of '49 were not to be stopped by lack of roads. In the new Mormon village they found Capt. Jefferson Hunt, formerly of the Battalion, and from him learned of the Old Spanish Trail over which he had traveled from Los Angeles to Salt Lake. This route, first explored in 1829-30 by William Wolfskill and a group of trappers from Santa Fe, had been used annually by the pack trains of Spanish traders ever since its discovery.

The trail was marked by the bones of animals which had died of thirst along the way. Captain Hunt believed he could take wagons over that route. He agreed to guide the 49ers for \$10 per wagon.

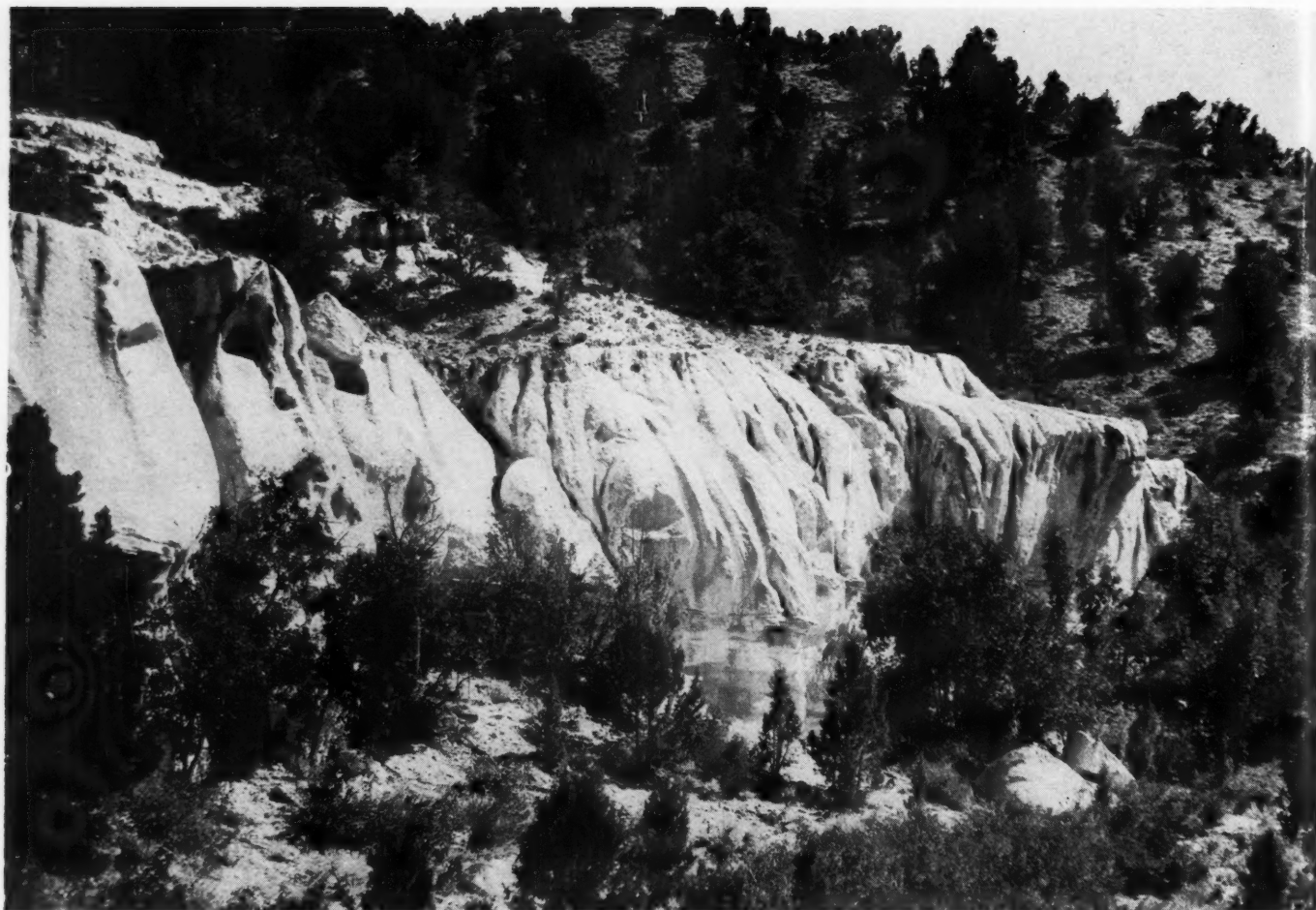
Down through Utah trekked the various detachments later to be known as the Death Valley Party. Near where Parowan now stands, they first struck the Old Spanish Trail and halted to form a more compact company. There were more than 200 wagons and nearly as many packers, including the missionary party.

They traveled together until they reached the future site of Enterprise, Utah. At that point a meeting was held to decide whether they should continue on the Old Spanish Trail or strike out more directly westward. Due to the persuasive oratory of an ill-advised preacher, and the production of an alleged map showing a cutoff, nearly the whole company decided to strike out due west, leaving less than a dozen wagons to follow Hunt over the known trail. Among those who started over the supposed cutoff were William Manly, those mentioned in his story, and Bigler with his missionary party.

Manly's story, written from memory many years later, is a saga of desert travel, but is not a daily record and therefore not detailed enough so that his route can be traced accurately. Bigler, however, had been keeping a journal ever since he joined the Battalion in '46, and his record of this journey of 1849



Charles Kelly, right, and J. Roderic Korn, standing at the rock face on which Henry W. Bigler carved his initials in 1849



Bigler's initials were carved at the base of these white volcanic cliffs near the head of Beaver Dam wash in southwestern Utah.

was merely a continuation of the series. Parts of his journal have appeared from time to time in abridged form in various publications, but it was left for the W. P. A. Writers Project in Utah to make a complete transcript. Reading that transcript I found the entry of November 3, 1849, where he says he cut his name and the date on a rock. It occurred to me that it might be possible to locate that inscription if time and the elements had been kind, and in doing so, to fix the exact trail of the Death Valley Party.

With a copy of his journal in hand, I started out last Labor Day to search for those elusive initials, knowing it would be like hunting for the proverbial needle in a haystack due to the rough nature of the country and lack of roads. On this quest I was accompanied by J. Roderic Korns of Salt Lake City and Frank Beckwith, newspaper publisher of Delta, Utah, two historically minded friends who had often proved their mettle on desert journeys.

At Parowan we left the paved highway and started along the Old Spanish Trail, which turns west to Iron Springs, then circles the north end of the Iron mountains to reach a spring at what is now Newcastle. Relying on Bigler's de-

scription we had no difficulty in locating the exact route taken by the 49ers, although we were compelled to follow many dim roads and sheep trails. Approaching Newcastle we found part of the old road made by the Death Valley Party still visible, and photographed it. Due to a cutoff made by Mormons after the settlement of Cedar City in 1852, this part of the old trail has been little used since that date.

Party Breaks Up

Twelve miles west of Newcastle lies the little town of Enterprise, where in early days were found large meadows watered by Shoal creek. Here Bigler, his Mormon friends and most of the gold seekers turned off the Old Spanish Trail to take their fabled cutoff. Instead of turning south with Captain Hunt, they struck out due west, traveling up Shoal creek for about 19 miles, when they turned southwest up a dry canyon known as White Rock wash. Following this wash to its head they reached the rim of the Great Basin and immediately dropped down into a deep canyon on the Colorado river drainage, leading almost due south.

Rumor had reached us that many names cut on the rocks by the Death

Valley Party in White Rock wash were still legible. But careful examination of every available rock surface failed to disclose a single name. Indian petroglyphs in the canyon may have been responsible for the rumor.

Crossing the wash on a rough road leading away from the old trail, we were soon lost in a maze of mountains. At last we came to forks in the trail and the way we took brought us to Acoma, a water tank on the railroad in Nevada. Here we were directed to Lamond Wood, an old pioneer in that section. We found Wood at Barclay (Joseca, Nev.) where he had lived for 60 years in the same house. He knew every inch of the surrounding country, and told us how to find the 49er trail. Among other things he said there were old names in the canyon indicated, and that on top of the mesa were the irons of some old linchpin wagons which appeared to have been abandoned after the going got too rough. It would have been impossible, he said, to have taken them further.

Korns, librarian of our expedition, then referred to another record, the

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Opals at Zabriski

MY first visit to the Zabriski opal field was many years ago when Max Felker and I made a midsummer trip into Death Valley. We went in over Wingate pass on a day when the temperature was reported at 134 degrees.

As we reached the top of the pass the great below-sea-level basin lay before us with all its white hot splendor. The alluvial fans of the Funeral range extended like gigantic webbed feet with their toes hidden in the shimmering haze that covered the floor of the valley.

We had entered the valley by the hardest route in the middle of August to see what this Death Valley country really was like in the summertime. We soon found out. Every few miles we had to stop and add water to the radiator. We were thankful for the advice of a prospector at Barstow. He told us to take all the water we would possibly need—and then add 10 gallons more.

We reached the flats in the floor of the valley and the fine white alkali dust filtered up through the floor boards and in through the windows. It burned our lips and irritated our nostrils. Behind us it ascended in a white cloud that blotted out all vision in that direction. Before us a quivering lake of

Probably you have never heard of the opal field at Zabriski near the southern edge of Death Valley in California. The gem trade knows little about this deposit for the reason that the stones found in this locality have no commercial value. They are too small. But they are colorful little specimens nevertheless, and make an interesting item for collectors.

By JOHN W. HILTON

quicksilver seemed to cover the road and recede as we advanced.

Suddenly there appeared ahead an object, dark and foreign to the landscape. It wavered for a moment and disappeared, then came in full view again. Our phantom became more distinct as we approached, but still we were unable to identify it. Sometimes it had the height of a three-story building, and then it would shrink to the size of a man. Finally it emerged from the mirage and we stopped our car beside a high-wheeled ore truck that appeared to be deserted.

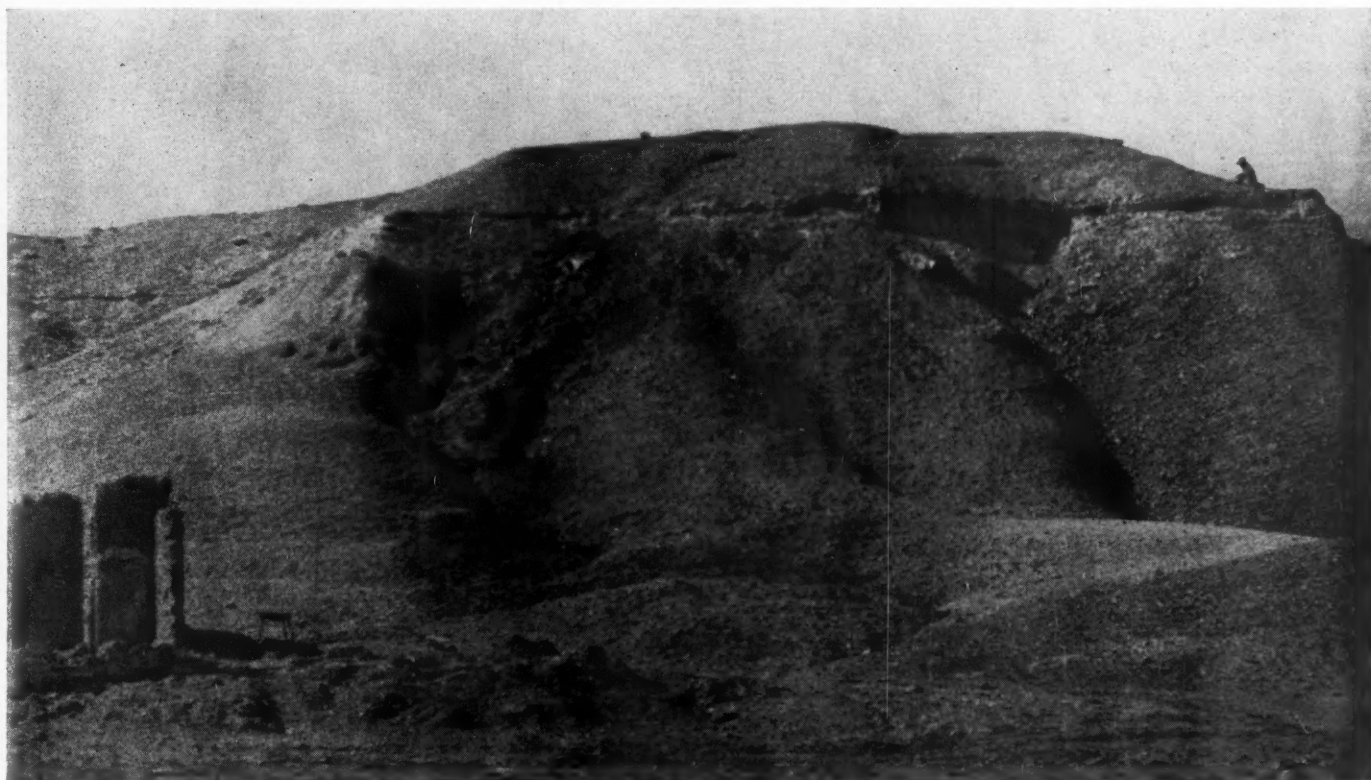
We called but no one answered. Then I walked around the truck and saw two human feet protruding under the shade of the running board. A pair of shoes and a torn shirt lay on the ground near by.

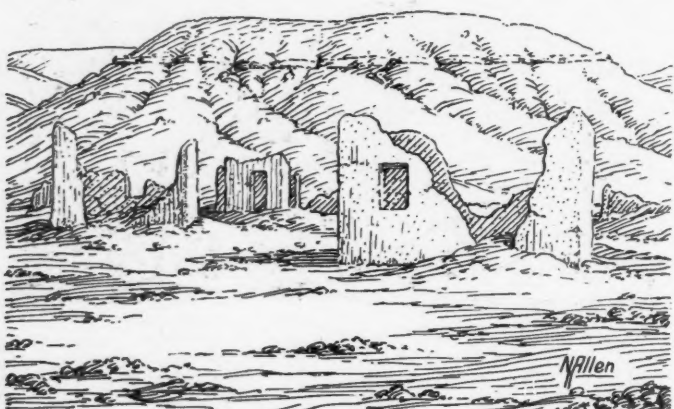
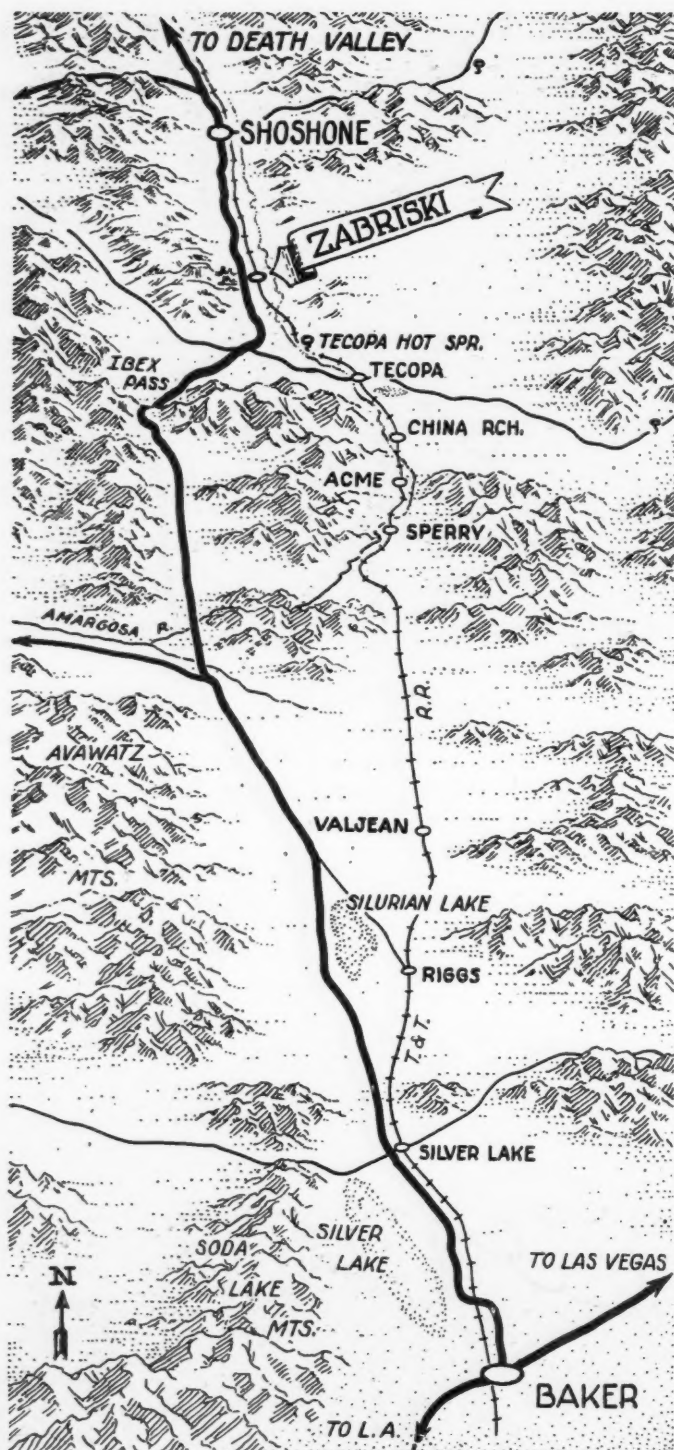
I called Max and we stood there hesitating. We were both familiar with the tragedy of heat and thirst on the desert—of the victims in a final delirium tearing their clothes from their bodies. That torn shirt had a foreboding look.

Then Max stepped over and nudged one of the feet with his toe. An answering grunt from beneath the truck dispelled our fears. A moment later a sleepy-eyed individual emerged from beneath the vehicle.

"Are you all right?" one of us asked.

On the slopes of this hill, within a stone's throw of the paved highway at Zabriski, John Hilton picked up the opal specimens pictured on page 11. Standing walls of the old ghost borax camp are seen in the lower left corner.





"Sure, I'm okay," he answered. "Guess I must have dropped off to sleep. Shore's hot, ain't it?"

"You mean there isn't anything wrong?" Max asked.

"Oh, nothin' serious. Just a flat tire on this crate—and I don't intend to fix it until the sun goes down. You fellows had better crawl under here out of the sun."

It was noon and we got our lunch from the car and accepted the invitation. We washed our sandwiches down with water from hot canteens.

The ore truck we learned was being operated between a lead mine in the Panamints and the railroad at Shoshone. The driver had spent most of his life around the mining camps in the Death Valley region and had a store of experiences to relate.

Eventually the subject turned to gems and when he learned we were interested he began telling us of various deposits in that area. A majority of the places he mentioned were inaccessible at that time of the year, but when he told us there were opals near the old town of Zabriski we began asking questions. We intended to go out by way of Zabriski and Baker, and this might be an opportunity to obtain opal specimens for our collections.

We learned several efforts had been made to develop the deposit commercially, but that all the gems found so far had been too small. Also, he said the miners had been told there was not much demand for opal because it was a bad luck stone.

The legend that opal is unlucky probably dates back to ancient history when the soothsayers of the period attributed mystic powers to the gem—but warned that any effort to use it for selfish or evil ends would doom the owner to ill fortune. At a later date it gained disrepute among English speaking people after Sir Walter Scott had used the stone in one of his novels as the symbol of ill omen.

Our truck-driver friend expressed the view that no mere "rock" could affect the lives of people either for good or evil other than the pleasure it gave them because of its beauty. We agreed with his conclusion, and so the discussion ended.

Following our friend's advice we took a siesta under the truck and then with the sun dropping toward the horizon resumed our journey.

This was before the era of good roads in Death Valley and as we ascended the grade toward Jubilee pass the going became rougher and the curves sharper. A recent cloudburst had not improved the trail.

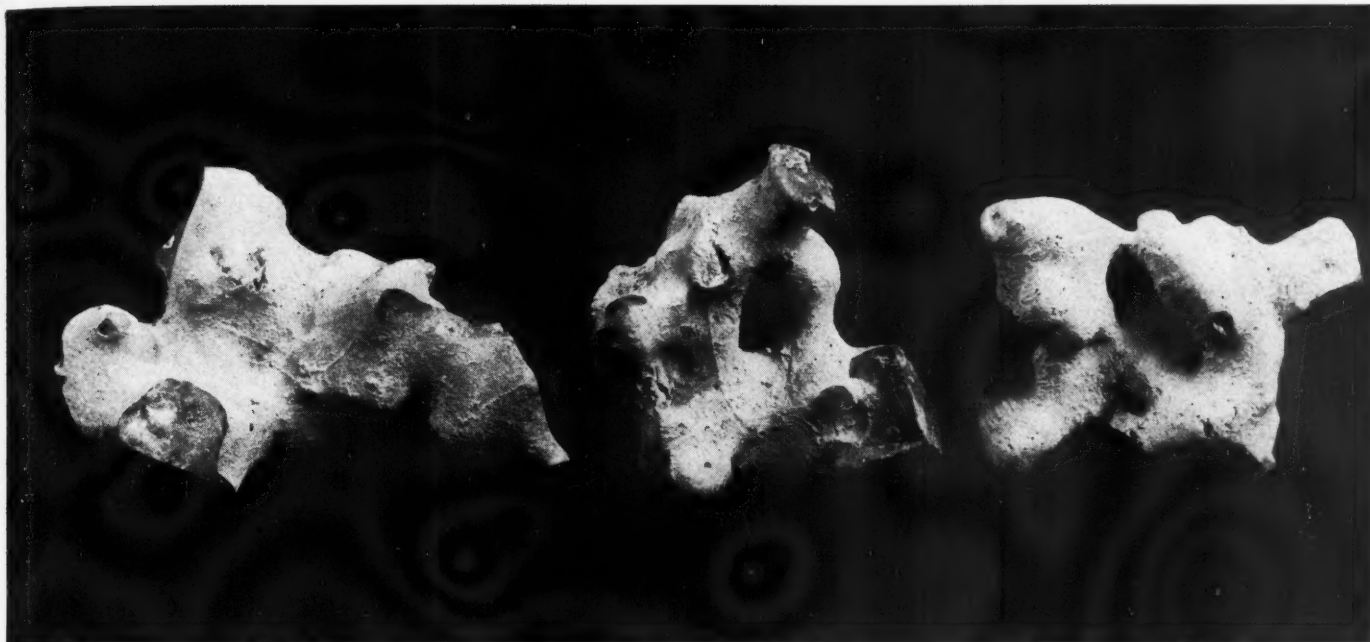
As we were climbing the last steep pitch toward the summit the motor coughed and died. We tinkered awhile and then decided to investigate the gas supply. It seemed incredible that we could be out of fuel, but we had not allowed for many miles of low gear driving and the increased consumption due to high temperatures.

There was a gallon of gas in the tank, but the pitch of the hill was so steep it would no longer feed to the motor. Then Felker furnished the idea that solved the dilemma. "Let's turn around and back 'er up the hill," he suggested. It worked, and we reached the top of Jubilee pass in reverse.

Since the road from the summit to Shoshone is nearly all downhill we were able to make it without mishap. The thermometer on the porch at the general store registered 124 degrees.

The moon had risen by the time we reached the old borax camp at Zabriski. It was a spooky place. The walls of the ghost town, with gaping windows and doors, cast long weird shadows across the borax caked soil. But we wanted to find some of the opals, and so we spread our beds on the ground for the night.

We tried to hurry the breakfast next morning so we could



Here is a slightly enlarged picture of the fantastic clay concretions in which the Zabriski opals occur. The gems are not visible until the matrix is broken.

be out in the hills before the sun was too high—but the meager supply of wood at the old borax works wouldn't burn. After losing both time and temper we discovered the sticks were so impregnated with minerals they were practically fireproof.

Eventually we warmed our coffee over some brush twigs. Later in the day when we returned to camp we found that the core had burned out of some of the original firewood, leaving a hollow shell of fireproof wood a half inch thick.

If firewood is scarce at Zabriski dishwater is at least plentiful. Although the flowing well water is not fit to drink, it reaches the surface at just the right temperature for use in the camp kitchen, and carries so much borax it does a perfect job of cleaning without soap.

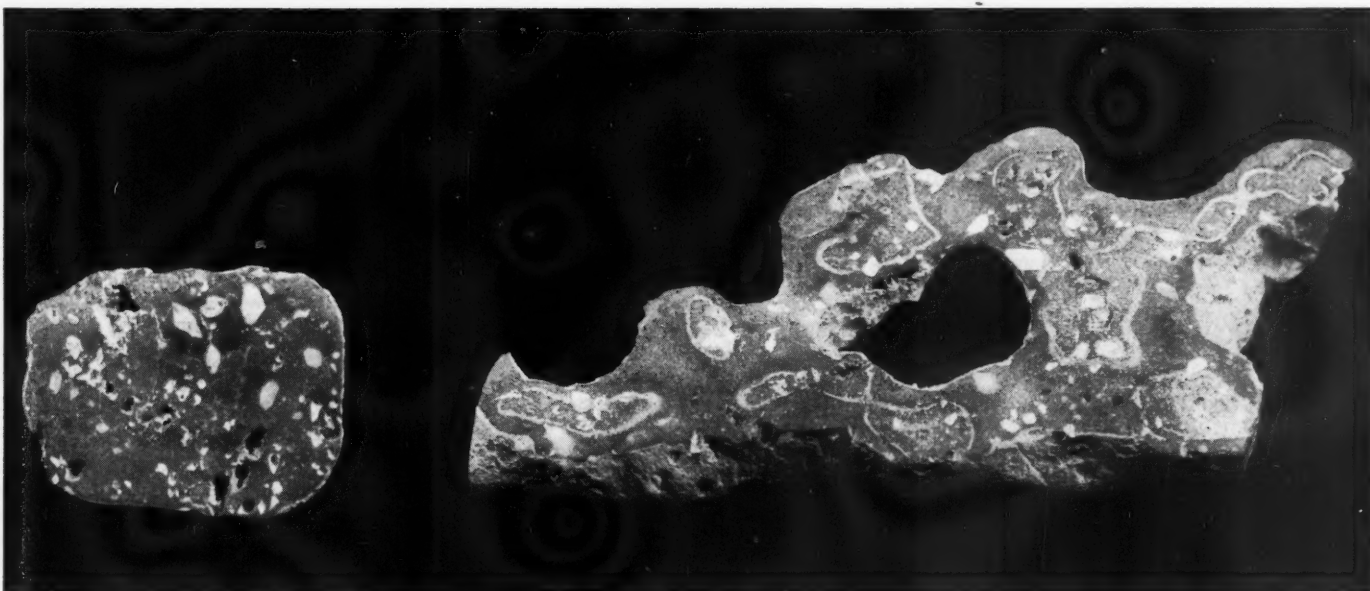
We climbed the slope back of the townsite and found

pieces of clay containing sparkling bits of fire opal. Surely, I thought, if tiny opals are so common in this formation there must be a quantity of larger ones somewhere in the vicinity.

Several hours of hiking in the hot sun failed to disclose any gems of commercial size, however, and we returned to the hillside where we had found the small gems in place in small concretions. We discovered that the prettiest stones were beneath the surface of the ground.

Opal, unlike most gems, is a jell or colloid and as such is capable of gaining or losing water. The surface opals at Zabriski had lost a high percentage of their moisture and were white and opaque. Just under the surface, those not exposed to the sun's rays remain translucent and brilliant.

Continued on page 33



Here are cross-sections of the opal-bearing concretions after they have been cut and polished. Some of the white deposits shown in this picture are opaque and without luster while others are sparkling bits of fire opal. The figures in the picture are enlarged to one and one-half times the size of the original specimens.



Katherine Nish lives in a humble home of sticks and mud—but there is real art in the products that come from her deft fingers. Photo by R. H. Peebles, Sacaton, Ariz.

Rhythm that Comes from the Earth

By ANTOINETTE S. DUCLOS

Their materials come from the desert, their pattern is only a mental image — and yet the women of the Pima Indian tribe in Arizona produce some of the world's finest basketry. This intimate story of the Pima women and the native art they have fostered down through the ages is told by a woman who lived for many years on the reservation.

RIGHT winter sunshine fell warmly on the little Arizona settlement of Pima Indians at San-tan where Mary Juan sat outdoors, tailor fashion on the floor of the ramada, weaving a beautiful basket.

When I walked across the hard dirt floor Mary looked up quickly and gave me a cordial greeting. When I began talking to her she called her granddaughter to interpret for us. Although she understood some English she preferred to speak in her native tongue.

She was making a work basket, one of those large bowl-like containers which the Pima women of untold generations have used for gathering grass seed, winnowing grain, and kneading bread. The deft movements of her slender brown fingers fascinated me, and as she surely and swiftly wove the fibers into the design of her basket my admiration for the artist grew. As I sat there on a low box I learned that I was watching a process which was the culmination of almost a year's work.

The making of a Pima basket really begins when the Gila is in flood and the sap is rising in the willows that grow along the riverbed. Then the women go out and gather the slender stems of the previous season's growth. Each branch is carefully tested for the proper "snap."

Mary and her granddaughter showed me how the stems were made ready. The

little girl, with a shy smile at the stranger, held a twig between her teeth and drew off the bark, which in spring is slippery. Then, holding the white stem by the small end, she started three splits with an awl and attempted to carry each one to the opposite end by running her thumb nail along as the split proceeded. But the reed was dry at this season and Rosetta wasn't very successful. In the spring the stems are spread in the sun to mellow after the bark is removed. For a finely woven basket Mary would have split them into five or six parts rather than three, and this with her teeth instead of the steel awl which modern Rosetta used. The slender splints are bound carefully and stored.

It is June or July when Mary gathers the tules, or cat-tails. They are in the green stage then, and are split into strips immediately so that the cut edges curl together, making each strip look like a round stalk about the thickness of a knitting needle and about three feet long. They are bound, and stored with the willow bundles.

In late fall, the strangest material of all was gathered and prepared for use. This time Rosetta and her grandmother went to the edge of the corn and cotton fields. There they found the ripe, black seed pods of the dry-stalked *Martynia*, or devil's claw. Rosetta excitedly stripped off handfuls of the pods to drop into her basket. She liked to twirl them around by

the two black horns. What a beautiful design they were going to make for her first real basket!

Before they could be used, Mary had to soak the pods in water to soften them. After a day or so of soaking she buried them in wet earth until they were mellow. Each horn was then taken by the tip and an awl run under the outer coat. The fiber thus loosened was seized in her teeth and pulled off the entire length of the horn. Each pod furnishes from two to ten strips six inches long.

Now it was winter, and Mary had nearly finished her first basket of the season. At her elbow was a small pail of water in which she kept willow and devil's claw soaking so they could be easily handled. Overturned beside it was a tin can with holes of various sizes punched in it. Mary smiled when I looked questioningly at the tin can. She explained that for this basket, which was to be a particularly fine one, she had drawn each willow strip through the holes until it was smooth and even. The age of tin cans has then its compensation — this was far easier than scraping each branch to the desired size and texture.

She had started the basket with the black fiber, then for the woof or inside coil had taken several strands of the tule. Gradually she had laced the willow and devil's claw in and out about them. It has always been a source of wonder to me

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that a woman could begin in the center and enlarge the coils so evenly all of them bear the same relationship to one another. To maintain the proper curve and at the same time be sure that every splint or strand has the same tension is an accomplishment not every basket maker can attain. But there were no bulges or lumps or drawn places in Mary's basket. With all her care, however, the completed basket would be rough on the inside and out, so she was going to polish it with a rough cloth until it was smooth and glossy.

A slow, exacting process, she had spent almost her whole time on this one basket since her materials were finally ready. When I asked how much she could do in a day, she replied that in weaving a coil of six inches she would consider once around a good day's work. A friend of hers, she continued, had spent a year of her leisure time making a three-petal squash blossom, and a tourist had insisted on buying the finished basket for \$5.00.

Rosetta had been patient a long time; she had dutifully repeated to me the processes her grandmother had been describing. But now she put down the tiny basket she had been working on and asked plaintively, "Grandmother, when will you start on the big basket? I am ready to begin mine, I know just the design I want to make." Remembering there was a guest, the child turned to me and explained that her grandmother was going to teach her to make the olla shaped basket and that for the first time she was to weave a design all alone. Of course, hers would be only a small replica.

Mary motioned toward the bundles of willows and tules and said, "Put some more reeds to soak, then run in and help your mother prepare dinner. After we have eaten we will start on the most difficult and most beautiful of all the baskets."

After the little girl had gone, Mary Juan became absorbed in the intricacies of the border design. As she bent her head lower over the nearly completed basket, there was a restrained eagerness that brought a glow to her features. There was no lost motion in her work as she used her teeth and hands with the precision of a machine.

Then it was that I thought of those other Mary Juans—hundreds of years ago there had been a Mary Juan to gather willows in the spring, tules under the hot summer sun, devil's claw in the fall, and in the winter to weave into her baskets the designs of the squash blossom,



The Making of a Pima basket.

the whirlwind, coyote tracks, the symbols of the elements. As generation succeeded generation other Marys had gone down to the lush streams, to the washes, the trailsides, gathering from the earth the treasures with which they glorified earth.

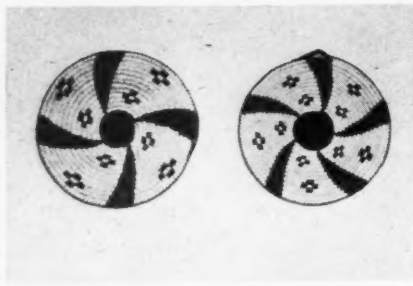
As I looked at this last Mary Juan I saw her suddenly in a new perspective. Her patience and endurance had been born of the slow swing of the seasons; her sense of line and color was a subconscious reflection of the rhythm and balance of earth; the artist's spirit within her stirred and brought the unity to completion. Mary was part of her Earth.

Never does a Pima woman need to draw a design for her weaving. Always she has the design clearly in her mind, whether it is an abstraction of nature shown in geometric figures, or a conventionalized form of desert life and growth. There are baskets with tortoises crawling up the sides and plaques on which Gila monsters repose, wide bas-

kets around whose sides birds are flying and others in which eagles, spiders, and mice are used as decorations.

Some of the modern designs have been adapted from prehistoric drawings in Santan canyon. One of the most unusual was copied from the mystic maze, or labyrinth, seen on the walls of the Casa Grande ruin. This same maze, showing eight passages, is said to have been found recently on old Grecian coins unearthed on the island of Crete. That its parallel should be scratched on an Indian ruin in Arizona and used by a modern Pima basket maker is the kind of problem which often faces the ethnologist.

There are Papago, Apache, Zuni, Yokut, Washoe, Chemehuevi, Pahute, Hopi, and Makah baskets, but there is none like the Pima. The white willow background soon turns to golden brown, and the devil's claw with which the design has been worked in softens with age. Some are so closely woven they hold water, although the imperviousness usual-



ly is assured by a coating of piñon gum. Not only will they hold water, but in the early days entire meals were cooked in the waterproof baskets. The women would drop into the basket a young, fat prairie dog, throw in some corn meal and acorn meal, then drop hot stones into the mixture. When the stew was cooked to a turn, they would lift out the "fuel" by inserting a stick into holes which had been bored through the rocks.

Old Josephine Wiston with her three-petal and five-petal squash blossoms, Catherine Nish with pictures of the desert and her stub-tailed Gila monsters, dainty Nellie Preston and her stars, Emma Newman with her mystic maze, Mary Juan and her whirlwinds—each reflects her tribe, her country, and her character, as well as the valley of the Gila.

Different tribes of the southwest became known for specialized types of baskets and as a consequence trading was common among them. The Pahutes for centuries wove conical baskets shaped like a hornet's nest, with a small opening left at the top. It was waterproofed with the usual piñon gum and was carried on a thong over the shoulder. It had a remarkable attribute which many a desert rat has wished his canteen might possess—its shape and balance were so cunningly contrived that if it were dropped or upset it would right itself without spilling any of the precious water. The Navajos were glad enough to trade their blankets and silver-turquoise ornaments for these useful basket-bottles.

As the tribes have their individual types of craft, so do they have their star performers. Several of the Indian basket makers have become known in recent years far beyond the limits of the reservations.

Famous Basket Maker of Nevada

Dat-so-la-lee, a Washoe of Nevada, is the most famous of all the basket makers. Thousands of spectators at the St. Louis Exposition watched as her fine stitches took form in the intricate pattern of a new basket. Several hundred bear the individual character of Dat-so-la-lee. She was one of the few who could adjust her work to mass production without lowering its quality. Many have been bought by museums in New York, London, Stockholm and by the Southwest museum in Los Angeles. Tiny baskets, two to four inches in diameter, brought \$25 to \$300.

Some of the designs of Pima baskets. When an Indian woman starts her basket, her only pattern is the picture she carries in her mind. Photographs of baskets in the collection of Orlan R. Parker, Sacaton, Arizona.

Some of the museums paid as much as \$2500 for her best products. She is probably the best basket maker among the Indian tribes.

The Chemehuevi at Parker, Arizona, are few in number. But some of them do marvelous work with willow and devil's claw. Instead of using tule for the woof, as Mary Juan had done, they use all willow reeds, so their stitches are extremely fine and even, 30 or 40 to the running inch.

The story of Kate Fisher, one of that tribe, indicates what is happening to many of the Indian arts today. With a "sale" as her express object, she set to work on a basket for the Southwest museum. For months she worked, using the finest stitches and producing the most subtle curves. She had a fine basket, an excellent basket. In fact, she thought proudly, even the workmanship could be overlooked and still it would be admirable, for into her design she had woven the American flag! She was sorely disappointed when the curator refused it, saying it was not pure Indian design. In a mystified voice she said, "I did not know the American flag was an unwanted design in the United States."

May Become Lost Art

If Rosetta continues in her eagerness to learn the secrets of her grandmother, another artist of the family probably will be known far and wide. But Rosetta has started to the government school. She is learning to cook and sew with modern equipment—bright aluminum, electric stoves, sewing machines. Soon the auto, the movies, the radio will add their distractions, and there will be little time for long mornings spent in weaving baskets. Besides, there is no longer a practical use for the fine quality baskets in the home. This is one of the important factors hastening the decline, for it was chiefly through a regard for their function that the most beautiful works were produced. It will be a temptation to Rosetta to hurry through a basket when she knows it will not be used to hold water anyway. Further, the more baskets she can make the more she can sell to buy the things civilization is teaching her to desire.

But perhaps Rosetta has learned too well the joy of a creative artist to desert the native designs and the fine weaving which raised Mary Juan to a place of high esteem. Perhaps she has observed that many white men are beginning to appreciate the finest in Indian art. At least, her family tradition and early training will prevent her making the mistake of Kate Fisher, and it is very unlikely that we will find Rosetta, granddaughter of Mary Juan, copying pictures of tomatoes and apples from tin can labels.

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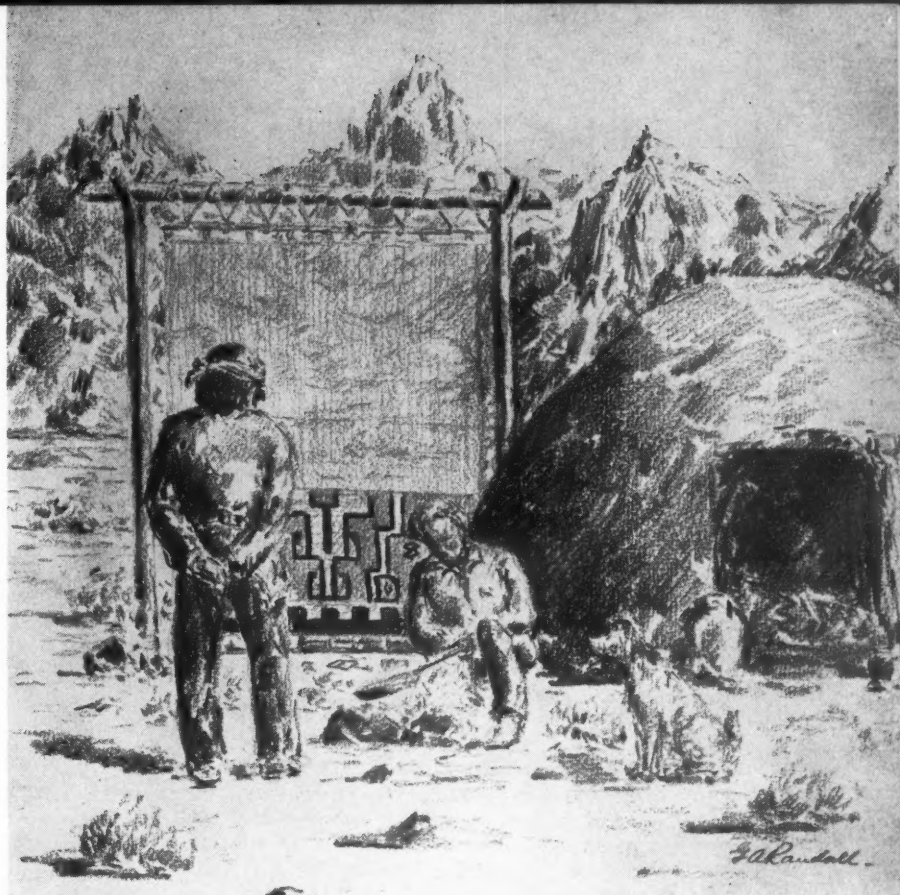
FEB

Everett Ruess is the young vagabond-artist and desert lover who disappeared in the untamed wilderness of south-eastern Utah late in 1934. His story was told by Hugh Lacy under the title "Say That I Kept My Dream" in the Desert Magazine last September. The following letter dated June 17, 1934, was written by Everett to his friend Bill Jacobs of Hollywood:

I Have Stayed with the Navajo

By EVERETT RUESS

Illustrated by G. A. Randall



Dear Bill:

A while ago I spent all my money for a bracelet and have been broke most of the while since. It is a beautiful thing; I had never thought of owning one, but it seemed to fit so well, and I liked the design and the three turquoises so well, that I have never regretted the purchase. By day it is like a bit of the sky on my wrist, when my hand is on the saddle horn, and by firelight the stones have a rich, greenish luster, as they reflect the leaping flames.

But one of my trader friends asked me as soon as he saw it, "How much did it cost?" He saw it only as merchandise.

Three evenings ago, I rode out into the open desert and the sage, with the vast reaching vermillion mesas and the distant blue mountains, glad to be alone and free.

I painted at sunset—dark towering buttes, with pure clean lines, and golden light on the western cliffs as the sun went down. Then I rode on while the new moon, a silver crescent, gleamed in the deepening blue of the night sky. A fire winked and blazed a mile or two away, at the foot of a lonely butte. As it was in my direction, I steered my course by it, thinking I might stop for a cup of coffee. The fire disappeared as we descended the little dips, but always appeared again, burning steadily. At last we reached it and I dismounted and entered the circle, making a greeting. There was an old grandmother, not thin, with straying locks of white hair, and the old man, her husband; two younger women, their babies, and a young buck.

When I asked Shimassohn, the grandmother, for some coffee, she beamed, asked me questions, gave me tea and coffee, pushed nanaskade (bread) toward me, and urged me to eat.

I have often stayed with the Navajo; I've known the best of them, and they are fine people. I have ridden with them on their horses, eaten with them, and even taken part in their ceremonies. Many are the delightful encounters, and many the exchanges of gifts I've had with them. They have many faults; most of them are not very clean, and they will steal anything from a stranger, but never if you approach them with trust as a friend. Their weird wild chanting as

they ride the desert is often magnificent, with a high pitched, penetrating quality.

The people I stopped with were Utes, come down from the North. After breakfast of hot goat's milk gravy, mutton, and Dutch oven bread, I brought in my burros as the two men and the grandmother were preparing to ride to post 15 miles off. Grandmother led her horse over the hill, as the Indian women will never mount in the presence of a white man.

I rode all morning. Tomorrow I shall start for Navajo mountain and the wild country near it. At Aljeto (Moonlight Water) an old timer will help me shoe my burros in preparation for the miles and miles of bare sandstone ridges that must be traversed.

Here in Kayenta I have been staying with Lee Bradley, my best friend here. He is a tall, commanding figure of a man, half white, and combining the best qualities of both races. He is influential in the tribe, and has the mail contract and several other government contracts. His wife is Indian.

Lee's house is a rambling adobe structure. There are several pets—a baby prairie dog, rabbits, a young goat, cats, and Kiske, who is undoubtedly the father or grandfather of my dog Curly. He is an enormous shaggy dog, with the same brown eyes and wide face.

Jose Garcia, my good friend at Chilchinbito, whose rare old Spanish hospitality I enjoyed last month, was killed a few weeks ago, riding the load on a truck. A wheel came off, and the whole load fell on him.

... In the throbbing heat of desert noon, siestas are in order, and I have been traveling at dawn and sunset, and by moonlight.

Did you get "The Purple Land?" I liked your line about "the kingly insolence of desert battlements."

I shall be returning to Kayenta in a month or so, before finally leaving for El Canyon Grande, and you can reach me here. So, until then, live gaily, live deeply, and wrest from life some of its infinite possibilities.

Your friend,
EVERETT.



Ethel and Pat Caughlin with one of their pets—a Lady Amherst pheasant.

Game Farm on the Mojave

Pat and Ethel Caughlin gave up the comforts of a home in the big city to try to win a living on a desert homestead. It was a losing game the first 10 years—and then they found a way. Here's a story that will interest men and women past 40 who have found it increasingly difficult to hold their own in the fierce competition of a business world which more and more is closing its doors to the middle-aged.

By RANDALL HENDERSON

Photos by Cal Godshall

AT the end of a dirt road winding through the jack oak and juniper of Baldy Mesa on the southern rim of the Mojave desert of California I found the little homestead cabin where Pat and Ethel Caughlin live.

I had never met the Caughlins but I knew I would like these people long before I reached their home. The morning

sun glistened from the snowbanks which crowned the 10,080-foot summit of Old Baldy a few miles to the south. The great basin of the Mojave, its sandy floor overlaid with a shaggy carpet of Joshuas and greasewood, extended to the distant horizon on the north. I couldn't imagine folks living in such a setting for a quarter of a century without absorbing some-

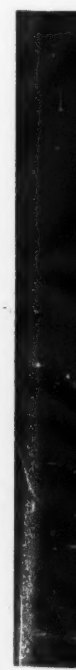
thing of the peace and beauty of this landscape.

They were doing their morning chores — carrying water and food to the hundreds of game birds which share the Caughlin homestead with Pat and Ethel. This place is known to breeders of wild fowl all over the nation as the Baldy Mesa Game farm. The Caughlins

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brought their first birds here 14 years ago—and today they are shipping quail and partridges and pheasants to points as far away as Honolulu.

Baldy Mesa is a rolling plateau. The bare dome of San Antonio peak—which Southern Californians prefer to call Old Baldy—towers overhead like a benign patriarch. It would have been a sacrilege to have called this scenic veldt by any other name than Baldy Mesa. It is the northern doorstep of the mountain.

There were few neighbors, and no trails worthy the name of roads when the Caughlins came out here to file on 160 acres of Uncle Sam's public land in 1914. Experiments had been carried on, however, which indicated there was enough moisture here to grow cherry and apricot trees. Pat Caughlin had served in Troop I, 4th U. S. Cavalry during the Spanish-American war, and since the period of his service could be deducted from the three-year homestead residence requirement, the Caughlins decided to take up the land and become fruit farmers.

Range Cattle Invade Orchard

They planted an orchard and the trees were making fine progress until one day a herd of range cattle came this way and found the tender foliage of the young cherry trees more appetizing than the native desert shrubbery. And that was the end of the fruit orchard. Pat still clings to the opinion that Baldy Mesa, with an elevation of 4500 feet, has the proper soil and climate and sufficient moisture to grow fruit. But until California changes its laws of the range the development of orchards here will be too costly for a homesteader.

The Caughlins liked the crisp desert air and the sunshine of their Mojave

ranch, and felt that sooner or later they would find a means of livelihood here. In order to provide funds for the initial development of their property, Pat remained in Los Angeles working as a mechanic for the Pacific Electric railway. For weeks at a time Ethel stayed alone at the little cabin in the jack oak.

"I have always liked this place," she asserts today. "Even when I did not see human beings for days at a time I preferred my little shack with its coal-oil lamp and its wood stove to the clamor and bright lights of the big city."

Tenderfeet on the Desert

The Caughlins made some of the usual blunders of the tenderfoot on the frontier. It was necessary to haul water and wood and groceries for some distance, and they agreed that a vehicle was necessary. Ethel went to an implement store in Los Angeles and picked out a shiny new buckboard with rubber-tired wheels. It was the latest model—but she failed to take into account the rocks along the road to the homestead. The rubber tires lasted just two weeks.

The buckboard was retired from service, and Ethel bought a wheelbarrow to push back and forth between the cabin and the box a mile and a half away where the rural carrier delivered groceries and mail. The wheelbarrow solved the rock problem—but the three-mile round trip with a week's supply of provisions was a severe test at times to the little woman who pushed the load.

It was not until 1924 that the Caugh-

The Caughlins attribute much of their success in raising game birds to spacious pens and the dry desert atmosphere.

lins found how to make their homestead pay its way. One of their neighbors was George F. Tallman, pioneer game bird farmer of Baldy Mesa. They bought a few mountain quail from him. Along with the birds he gave them generous neighborly advice from his own experience. Two years later the Caughlins shipped their first consignment of birds to the Hawaiian Islands—and were definitely launched in their new field of work.

They have never sold birds for food purposes. They prefer to market their surplus fowls to private and public agencies for breeding stock. After a couple of visits to the Caughlin ranch I understood the reason for this policy. It is a matter of sentiment. Pat and Ethel love their birds. Their special pets are the mountain quail—and when an order is filled and the well-packed crate of live birds is ready to go to Victorville for shipment there is genuine regret at the Caughlin homestead.

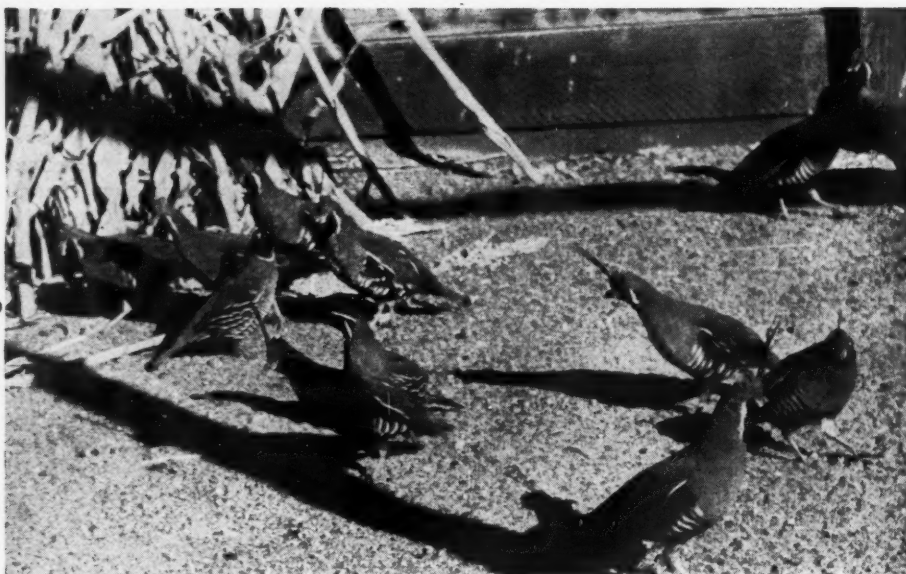
"We are looking forward to the time," Ethel told me, "when we will keep all our birds and sell only the eggs."

In recent years others have followed Tallman and the Caughlins to the Mojave desert for game bird farming—Ray Eppley at Baldy Mesa and Alice Quarterman at Phelan.

Birds Have Security Here

The pens and runways at the Baldy Mesa farm are scattered through the juniper and other desert shrubbery, providing as nearly as possible a natural environment for the birds. As a matter of fact the life of a quail or pheasant at the Caughlin ranch is far more secure than that of the wild fowl which faces the hazard of coyote and hawk and a score





Mountain quail—photographed in a corner of the Baldy Mesa pens. Pat and Ethel have had unusual success in raising these birds.

of other predatory birds and animals on the open range.

Although the pens include several species of quail, the chukker partridge, ring-necked pheasant, dove and a wide variety of other American and foreign birds, Pat and Ethel have been especially successful in raising the native mountain quail. They attribute this mainly to the fine advantages of their location on the desert side of the coastal range.

"We have warm, dry summers and cold winters," Ethel explains. "The quail are kept healthy and made happy in large comfortable quarters. Each pen has its own natural tree growing in it, with a dry shelter-house attached. In nesting time we place additional covering in the corners of each pen, bringing in desert sage and wild buckwheat which the quail like so well.

"We try to keep the confidence of our birds. If a hawk hovering around the pens at night makes them nervous and afraid, we only have to talk to them to calm their fear."

State laws prohibit private individuals from trapping wild fowl. The State Fish and Game commission may do so, however. The Caughlins believe that trapped birds are valueless for breeding purposes.

"Early in our experience," she explains, "we bought a pair of Hungarian partridge, trapped in Hungary and imported to the United States. We had them three years — but they remained trapped birds. We never were able to make friends of them, nor did the little hen ever lay an egg. We have had the same experience with Bob Whites trapped in the United States. The Bob Whites hatched and reared in our own pens will eat from our hands—but the trapped birds never become reconciled to captivity."

Instead of incubators and brooders, the Caughlins use bantam hens for hatch-

ing and mothering their wild fowl. One of the principal items on the menu they have devised for their birds is cottage cheese, made from skim milk. This of course is mixed with various grains, including yellow millet, cut hulled oats, feterita and white Egyptian corn for feeding at different periods in the life of the bird.

All the fancy foods and natural runs and other gadgets and ideas will not

make a success of the bird farm industry if one element is lacking, according to Pat Caughlin. "You have to have a genuine liking for your birds," he explains. "They seem to sense your feeling toward them—and you cannot fool them."

Pat and Ethel haven't acquired a fortune in their game bird business. But they have reversed the old story-book tale of the country boy who went to the city and made good. They were two middle-aged Americans with little capital when they left the city to come to the desert. They've made good in their new home. They've succeeded in the sense that they live in their own home in the great outdoors where they have peace and independence.

Hundreds of visitors find their way each year to the remote Caughlin ranch. Perhaps many of them go there to see the birds—but I suspect that they return again and again because it is a fine tonic to spend a few hours at a desert homestead where two kindly humans have blended their lives so completely with the natural elements of a beautiful environment.

Monthly Prize Awards to Amateur Photographers . . .

Two cash prizes are awarded by the Desert Magazine each month to amateur photographers sending in the best prints of desert subjects. The possibilities of photography on the desert are almost unlimited and any amateur with a camera is eligible to compete in this contest.

Among the many possible subjects are close-ups of desert plant and animal life, character studies, landscapes, Indians, canyons and rock formations—in fact any picture that belongs to the desert country.

The Desert Magazine has been awarding these prizes regularly since the publication was started in November, 1937, and many beautiful prints have been received and published during that period. There is always a chance that non-prize winning pictures will be pur-

chased for regular illustration purposes in the magazine.

For the picture awarded first place by the judges in this contest a prize of \$5.00 will be paid, and for second place \$3.00. Following are the rules of the contest:

1—Pictures submitted in the February contest must be received at the Desert Magazine office by February 20.

2—Not more than four prints may be submitted by one person in one month.

3—Winners will be required to furnish either good glossy enlargements or the original negatives if requested.

4—Prints must be in black and white, 2 1/4 x 3 1/4 or larger.

5—Pictures will be returned only when postage is enclosed.

For non-prize-winning pictures accepted for publication \$1.00 will be paid for each print.

Winners of the February contest will be announced and the pictures published in the April number of the magazine. Address all entries to:

CONTEST EDITOR,
DESERT MAGAZINE,
El Centro, California.



D. G. Sniff in his "backyard" near Indio, California. Photo by Dewey Moore.

In the ancient world date culture was largely governed by superstition. In United States, although the first palms were brought here for commercial purposes less than 50 years ago, it has become a highly developed science. For a comparison between old and new world methods, the writer of the accompanying article went to D. G. Sniff, one of the veteran date growers in the Coachella Valley of California. Here are some interesting sidelights on a desert industry strange to a majority of Americans.

Hothouse of the Gods

By FLINT HINDMAN

TO D. G. Sniff, veteran date grower of Coachella Valley, California, the breathless hot days of Coachella summer mean that dollar marks are ripening on his date palms. To the motorist, hurrying to the coast in front of his careening trailer, it is plain inferno!

Nevertheless, the motorist is better off than a Bedouin. For, if the Arabian nomad can find an oasis somewhere on the blistering desert, his usual refreshment consists of a sackful of low-grade, old-world dates and a mouthful of tepid water. Whereas, the motorist can pull off Highway No. 111 at Sniff's show-place, which he modestly calls his "backyard," and order one of these creamy date milkshakes.

Coachella dates surpass old-world varieties—because Coachella growers excel old-world growers in scientific date production. And in saying Coachella Valley, the hothouse of the gods, one might as well say the United States. For nowhere else in our broad land is there a region with such prevailingly sandy soil, intense summer heat, the exact sparseness of rainfall, all of which are paramount in the production of prize dates.



This Arab is depending on the mounted sheep's skull to bring him a good date crop. Photo courtesy Paul B. Peponoe.

Imperial Valley, although its soil is predominantly clay, is likewise well adapted.

Arab lore set much store on land which had been cultivated for a long time, and as a consequence the ideal site for a date farm in old-world eyes was the remains of a prehistoric city. The simpler requirements of American growers are given by Sniff:

"We have found that palms planted in heavy soil do not develop sufficient root systems to produce heavily. In light soils roots will be found 25 feet deep and 100 feet from the palm."

In the old world, the date palm is left more or less to its own devices and the crop is taken generally as a gift from the gods, or the lack of it as a castigation

from the same source. But the attitude of commercial growers in Coachella Valley is well-phrased in Sniff's remark, "If I did not receive about 150 pounds of dates each season from one tree, I would consider myself a poor business man."

Old-world growing methods, past and present, are quaint in comparison with modern American methods. To such a fine point has the matter of irrigation been perfected that dates can be regulated in the growing so that the harvest finds them with just the desired amount of moistness or dryness.

Sniff said of seedlings: "Trees can be grown from seed, but due to the very ancient culture of the date palm, the mixture of characteristics in any one seed

results in a veritable grab-bag cultivation. Growers depend upon offshoots from standard varieties for commercial plantings. Haphazard chances would result in financial loss, whereas suckers or offshoots always come true to type."

Even the Arabs, judging from their fantastic treatises on the subject, recognized that seedlings were uncertain to say the least. One writer advocated that a seed should be placed horizontally and covered with a mixture of manure and salt. Another held that failure was due to the temperament of the planter.

"Beware!" he wrote, "That the planting is not done by a mean person, or one with a bad mouth and melancholy humor. He should have an aspect of happiness and joy." And a further warning by the same writer stated that the planter could not hope to fool the date seed by simulating joy—the seed would immediately see through such hypocrisy and refuse to grow!

On the other hand, consistent results are obtained, as Sniff points out, from offshoots, those children of the palm which are the results of sexual propagation. Offshoots spring from the palm, and their root systems are generally connected with the mother tree. Arabs erred in their selection of offshoots which had root systems of their own, for when planted in the ground, offshoots form entirely new root systems and the old roots atrophy.

Alone of the Orientals, the Egyptians use larger shoots, sometimes up to 600 or 800 pounds in weight. The large ones are tall enough to withstand the annual flooding of the Nile.

Irrigate with Syrup

Arabs plant a handful of stones with the roots believing that they will widen them out so greater nourishment will be obtained from the soil. The Arabs maintained that if a palm were denuded of all its offshoots it would send forth no more; therefore, in old-world groves, two or three offshoots are left with the palm. When questioned on his findings in this regard, Sniff replied: "We do not find this true with us."

In fertilization, Arabs also had some bizarre ideas. They believed that roots should be irrigated with date syrup in order to make the fruit sweet. Wine lees were also excellent.

At times, fruit falls prematurely from the palm as a result of bad weather; at other times, it falls for no apparent reason. When the latter happened, the Arab immediately set out through his plantation hunting for the crab's leg which some enemy must have tied to one of his palms. That was why his fruit was being damaged. But really intelligent Arabian growers, in order to guard against such

deviltry, erected a sheep's skull set on a pole in their plantations—it was a sure charm. If this treatment failed, then a slip of paper was hung on the trees bearing a verse from the Koran:

"He holds up the heavens to keep them from falling on the earth unless as a result of His will, because God is merciful and compassionate toward all men."

Few palms ever withstood that prayerful entreaty!

In earlier times, old-world growers had only a hazy idea about pollination, that delicate operation which is the very life of date growing. Mahomet, although a first rate prophet, erred when he invaded the realms of horticulture. It is a recorded historical fact that he looked upon the artificial impregnation of the palm as an unnatural practice and one season prohibited his followers from doing so. With misgivings they obeyed and in the fall there was no date crop!

Mahomet was called upon to explain. He responded that his followers were weak in spiritual knowledge but were worldly-wise; therefore, in the future, Mahomet would confine himself to the government of their spiritual welfare and they could manage the affairs of the world to suit themselves. Next year the palms were artificially pollinated and the crop was as good as usual.

Six-year-old Trees Bear

Sniff's trees yield their first crop at the age of six years; and the tenth year finds them in full production. Each year a tree grows a new ring of branches; thus the cost of harvesting mounts as the tree soars. Male and female palms are identified by their flowers. The female is the fruit producer. Male flowers are whiter and bunched more toward the end of the "paddle." Females have longer stems, spread more evenly over the "paddle" and are of a yellowish color. The male blossoms produce the pollen.

At a certain time of the year, generally February, depending whether the date is an early or a late variety, the "paddle" or stalk appears with its flowers encased in the sheath-like wrapping, or spathe. The pollen is either collected from the male and sprayed over the female blossoms or dipped in a wad of cotton and tied among them. "Or," Sniff added, "a small twig of male blossoms is placed among the female blossoms and tied in with string." The action of the breezes attends to the pollination. Unpollinated dates have no seed, are a pale waxy yellow and have no sugar.

"Visitors in my backyard," (Mr. Sniff's date curiosity shop), he remarked, "usually are interested in the square wooden platforms hanging in midair about the trunks of the palms. The picker travels

around this boardwalk and selects the dates which have matured. Another contraption I use is a ladder which can be moved about the tree on a circular track. Somewhat more commercialized than the old-world method of shinnying up a tree and cutting down an entire bunch of dates, the ripe with the unripe!"

But it is because of such precise methods that the American tree produces many more "crow's dates" as the Arab would say. The crow is said to pick the best fruit on the palms.

The harvested fruit is exposed to acid fumes to kill insect life. The dates are then cleaned by running them through machines lined with turkish toweling. Next they are graded and, if not used for immediate consumption, are placed in cold storage and kept frozen.

In the United States the date is used in many forms: in candy, in breakfast-food flakes, in delicious milkshakes, and as a confection in its succulent native state.

The Saharans usually eat their dates raw, but in parts of the Sahara dog meat is quite a popular side dish with the fruit. The Arabian would scorn such a diet, for in Arabia the dog is an unclean animal.

Cucumbers also are eaten with dates. According to the Arab, the cold of the one counterbalances the heat of the other, and the heat of the one diminishes the cold of the other.

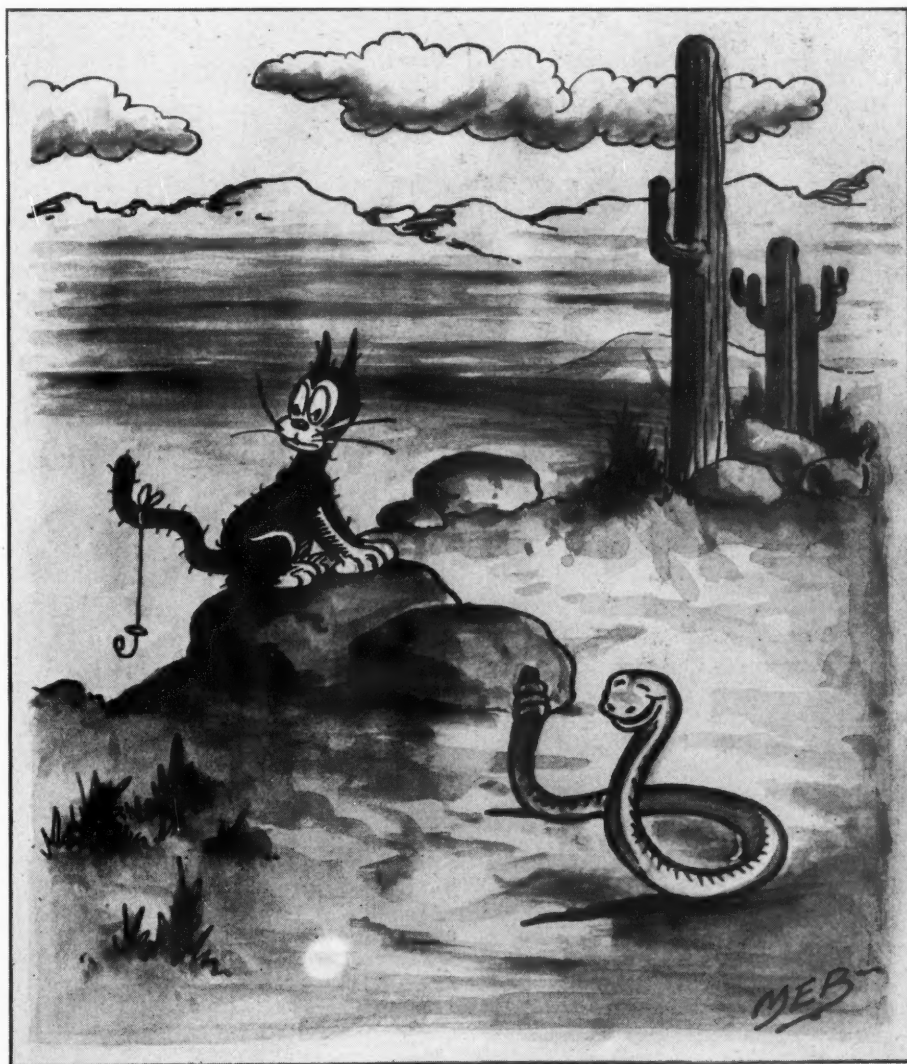
Sniff threw some light on the superstition when he pointed out:

"The only advantage the cucumber might have would be to dilute the sugar in the date. And water would do just as well!"

It is to this kind of common sense that the United States owes its supremacy among date growing countries. A scientific culture has been built in the new world upon the fantastic foundations furnished by the old world, a stream-lined culture which science takes the place of superstition.

SIDEWINDER SAM

—By M. E. Brady



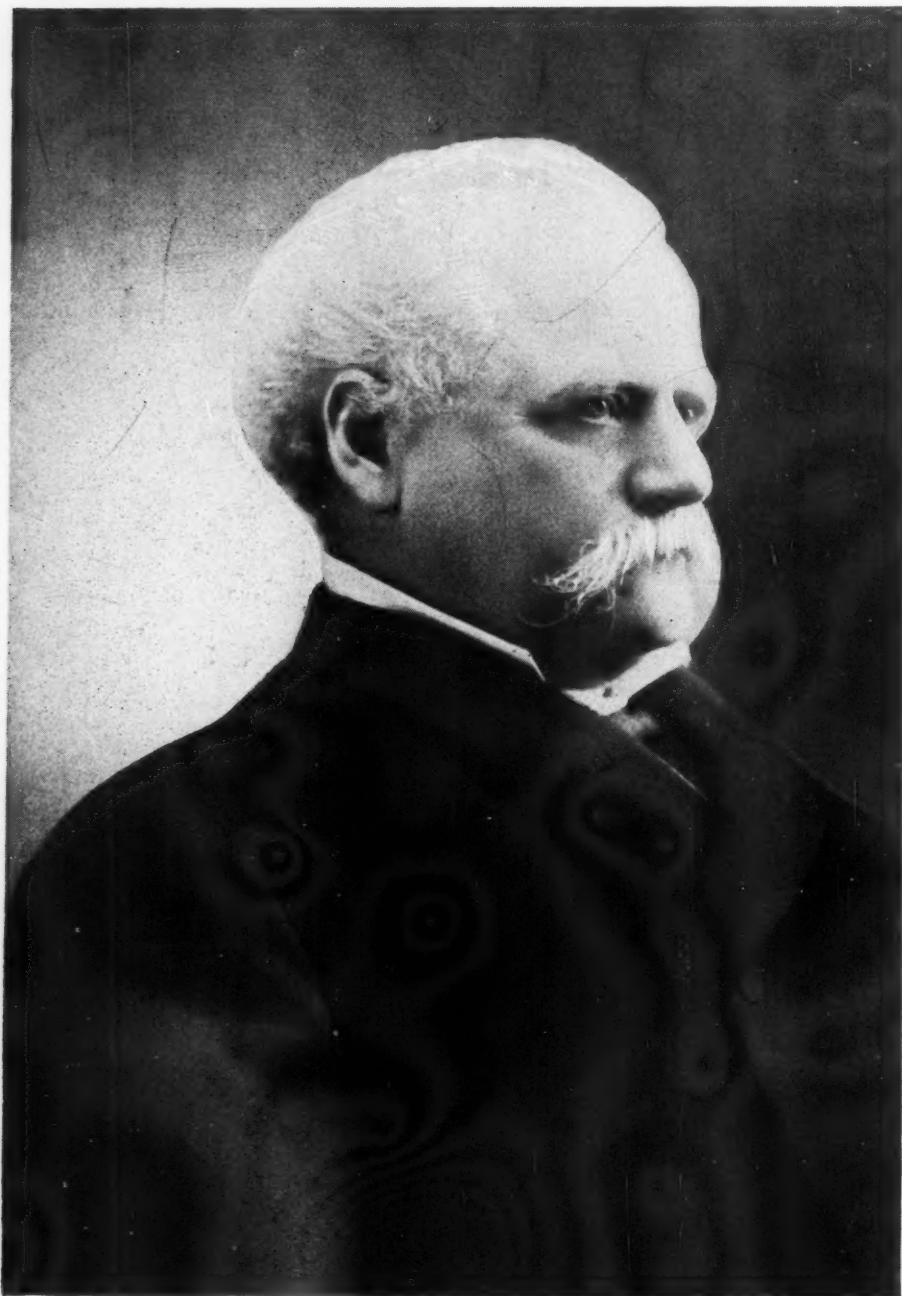
"I told Tenderfoot Tabby they caught dried herring in the dry lake."

Empire on the Colorado

--the Romance of Thomas Blythe

By ARTHUR WOODWARD

For many months Arthur Woodward has been digging into old court records and newspaper files seeking to piece together the story of Thomas Blythe, the man who first diverted water from the lower Colorado river for irrigation purposes. And here are the facts — many of them published in the *Desert Magazine* for the first time. The accompanying photograph of Blythe was made in San Francisco, probably in 1881.



IN the fall of 1882, clad in somber black with a grey and black shawl draped about his shoulders and a black slouch felt hat pulled down over his crisp white hair, Thomas H. Blythe stood at the edge of the Colorado river, alongside a narrow canal, peering down into the cut being blasted through solid granite.

Beside him stood a slender clear-eyed man garbed in more appropriate desert

costume of blue denim overalls, blue cotton shirt and a cork sun helmet. Blythe's companion was George S. Irish, a young Englishman 28 years of age.

Blythe had given to Irish the management of this first step toward the pioneer development of lands which have since become the fruitful fields of Palo Verde Valley and the thriving town of Blythe, Riverside county, California.

To Blythe, then in his 60th year, the little stream of water spurting through the temporary coffer dam which held back the turgid Colorado, represented victory. Already he had sunk \$82,000 in this 40,000-acre tract of bottom land and a 40-acre experimental farm laid out by William Calloway, his engineer.

Soon there would be enough water foaming through the rock headgate in the river bank to irrigate the entire valley. Blythe's dream of a desert empire along the river would be fulfilled.

"You have done a fine piece of work George," he said, "Go on with it. Finish the ditch. Then I have another job for you, a bigger one than this."

But, even as he spoke Thomas Blythe had a premonition that he would never live to see his dream become a reality.

To his associates in San Francisco, Thomas Blythe was a somewhat enigmatic character. They knew little of his past life or how he lived.

As a matter of fact Thomas H. Blythe was not his real name. He was born in Mold, England, July 30, 1822, Thomas Williams, a good Welsh name.

In his youth he worked in a draper's and grocer's shop in Ruthen and Denbigh. Later he went to Liverpool where he clerked in a clothier's shop. Still later, while yet a very young man he went into business for himself as a contractor at Birkenhead. However, he seems never to have been a successful business man. He failed as a contractor and it is said that as an aftermath of his unfortunate experience in Birkenhead he changed his name to Thomas H. Blythe and as such he was known the rest of his life.

In 1849 Thomas Blythe sailed on the ship *Antelope*, bound for America. Six years later, in 1855 he arrived in San Francisco, and there he was to live until his death, the evening of April 4, 1883.

Although he was considered a successful financier in his later years, it appears that only through fortuitous circumstances did he maintain his foothold in

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San Francisco's financial circles. Some time in the 1850s Thomas Blythe purchased blocks of property in San Francisco and in later years erected a large office building and a department store thereon. To these latter investments he owed his financial success, but his outside speculations ate up his surplus so rapidly he was often hard pushed for cash. When he died his San Francisco holdings were mortgaged for the sum of \$375,000. His office was at 724½ Market street. His residence for a time was No. 6 O'Farrell street.

He was a strange character, this man Blythe. By his own admission he was not a believer in Christianity, yet his favorite music was old hymns. Said Blythe in July 1881:

"Although myself a skeptic as to orthodox Christianity yet I believe in one Supreme and that man mentally is a triune made up of moral, intellectual and religious elements. Probably the words Devotional Deism will approximately express my religious views. If my child had been with me I should most likely have brought her up in my own faith; but as things stand I shall be perfectly satisfied to have her brought up in the Christian faith as taught in the Church of England with its sublime devotional service."

Blythe's views on marriage were as unorthodox as his belief in religious matters. Although there seem to have been many women in his life he married none of them in accordance with the regularly accepted rules of society.

A Romantic Interlude

During the 1860s and 1870s he revisited England and while on one of these visits he met Julia Perry in London in the spring of 1873. He had returned to San Francisco following this romantic interlude and early in 1874 he was informed that Julia had given birth to a daughter December 18, 1873. Blythe was delighted and wrote instructions that the babe was to be christened Flora Blythe, which was done. In later years this girl was known as Florentine Blythe. In December 1876, Julia Perry married Joseph Ashcroft and the baby Florence was reared by her grandfather James Perry. Blythe wrote innumerable letters

to England about the child. He sent a certain sum of money each year for her upkeep, and in return received letters from the grandfather, many photographs of the girl, and childish scrawls from Florence as soon as she was able to write. Each year Blythe hoped to be able to sail for England to claim his little Flora, but ill health and his numerous business affairs prevented him from so doing.

In the meantime several other women had claimed his attention. One of these was Alice Edith Dickason, an art and music teacher, whom he met in San Francisco in May 1878. According to her own testimony after Blythe's death, she became his "wife" through a spiritual ceremony dictated by Blythe himself and lived with him as a companion to the end. Although the law may never have recognized Alice Edith Dickason as Blythe's legal wife there is evidence that she was a cheerful helpmate and made him comfortable in his declining years.

Blythe was a well known figure on Market street during the 1860s and 1870s. He was five feet ten inches tall, inclined to be portly but quick and energetic in his movements, neat in his appearance and a trifle vain. He always wore black clothes and a high hat. When his hair and drooping mustache began to turn white in the 1870s he dyed them, but in his later years he allowed them to

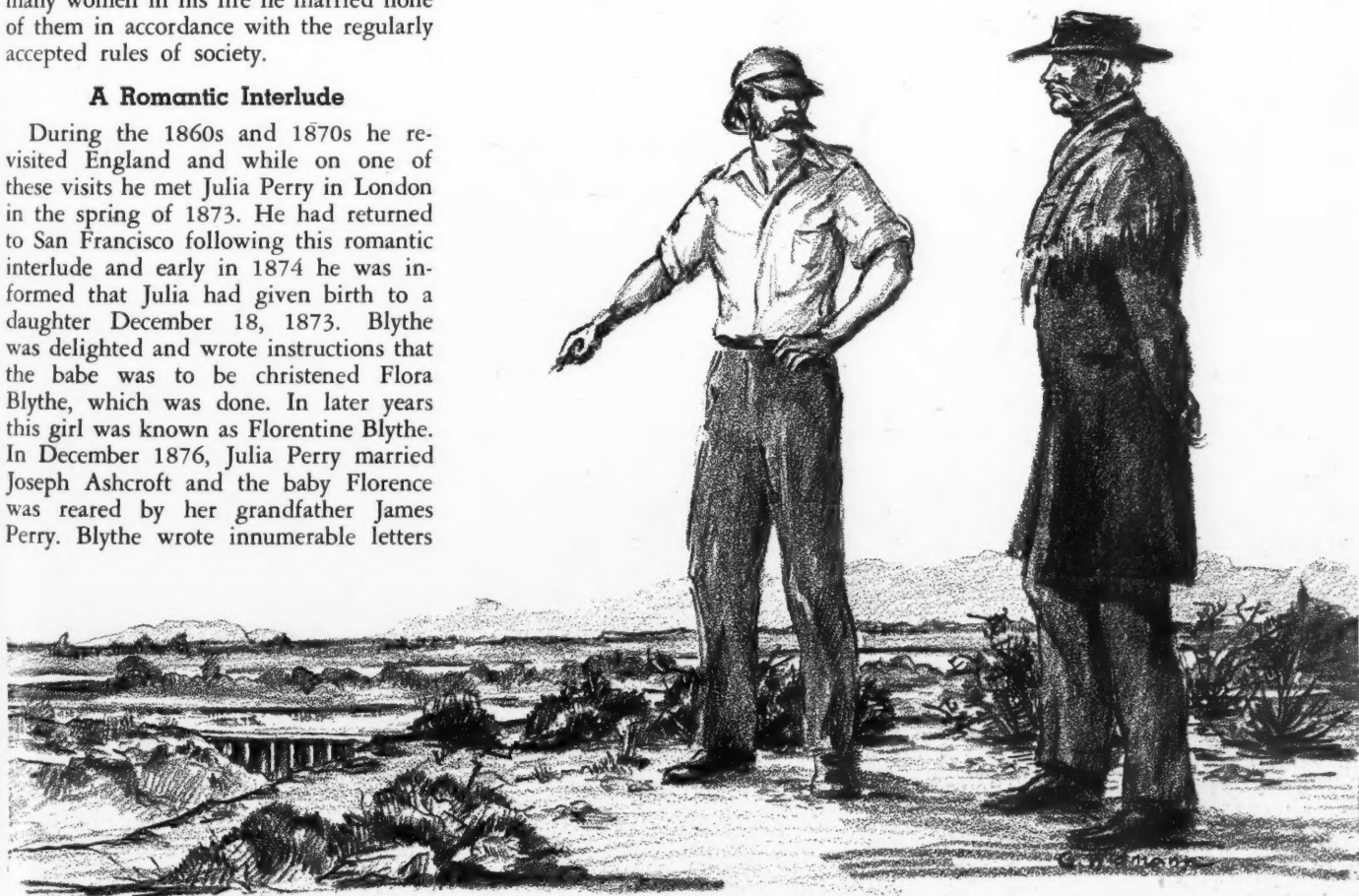
stay white, thus adding to his dignified appearance.

On pleasant days Blythe stood in front of his office building, accompanied by four huge dogs. Of these, a St. Bernard, "General Grant," weighing 155 pounds was his favorite. The others were "Fannie" and "Alf," large greyhounds, which were later sent to Irish on the Colorado river who in turn gave them away to the Indians, and "Baron" a coal black beast almost as large as "General Grant." Alice Dickason kept the latter after Blythe's death until the dog was poisoned in 1885.

Penchant for Pets

This penchant for pets was one of Blythe's eccentricities. At one time he had a chicken ranch on the roof, pigeons, a Mexican mocking bird, two cats, "Bob" and "Squint," a Scotty which answered to name of "George Washington Caesar Napoleon" and a little dog sent from the Seri Indians on Tiburon Island in the Gulf of California as a gift of General Guillermo Andrade, Blythe's unofficial partner in the grandiose scheme for colonizing a huge tract of land near the head of the Gulf of California in Mexico.

According to Irish, who was also a native of England, and who landed as a youth of 15 in San Francisco in 1869, General Guillermo Andrade was a Mexi-





George Irish, employed by Blythe to manage the Colorado river project in 1879. Mr. Irish now lives in Los Angeles and despite his years retains a clear recollection of his experiences in the Palo Verde valley. The above picture was taken in San Francisco in 1881 at the request of Mr. Blythe.

can promoter who acted in some sort of capacity for the Mexican government in San Francisco. Andrade was seen at the best clubs, but never seemed to have a bank account or any visible means of support.

General Andrade was introduced to Blythe in 1876 and told the latter of the immense advantages to be gained through the colonization of desert lands along the Colorado, near the head of the Gulf of California. The Mexican government would look favorably upon the colonization of such a tract and the right man could become a virtual sovereign of a desert kingdom.

With his eyes already fixed on one desert enterprise which bade well to be a financial success, Blythe plunged wholeheartedly into the plan. Andrade became Blythe's silent partner. The Mexican had an office in Blythe's building and for a year or so lived in Blythe's home. According to one statement the territory ultimately acquired in Mexico consisted of 100 leagues, some three hundred miles of uninhabited land, lying just below the border, beginning at a point not far from the present Algodones and extending south along the river to the Gulf. Under the contract Blythe was to settle 200 families on this delta terrain, 50 of these

must be on the ground before January 1, 1887. The settlers were to receive the land gratis, or for a nominal sum, and other considerations during the period of settlement.

As the years wore on this Mexican colony became almost an obsession with Blythe. General Andrade drew plans for an elaborate ranch. There Blythe intended to retire with his daughter Florence, leaving San Francisco forever. In 1881 he wrote Florence "When we get there we shall have plenty of horses and cattle and chickens and doves and ducks and turkeys and all kinds of birds, and I shall take all my dogs there too, and take my great big St. Bernard dog, General Grant."

In the last letter he ever wrote to Andrade, who was then in Guaymas, Sonora acting as business agent for the scheme, Blythe said:

"After all the fight, I hope you will be pleased to work with me in this grand enterprise and help me to carry it out to its full magnitude. The Gulf enterprise and the Colorado river enterprise are grand enough for one earth life to satisfy the most stupendous ambition. Let us let everything else go and give our whole soul to those two great schemes."

Calloway, the Dreamer

Let us now turn to the first desert venture and the men who were making it possible. One cannot follow Blythe through his last years without meeting and admiring the two men upon whom he leaned the heaviest for support.

It was in 1875 that Blythe met a cheerful, stockily-built civil engineer in San Francisco named William Calloway. This man the previous year had been engaged by the board of supervisors of San Diego county to lay out a new road from San Diego to Fort Yuma. So well did Calloway do his job that the board not only adopted his survey, but presented him with a fine surveying instrument as a token of appreciation.

Calloway had imagination. During the 1860s as Captain William Calloway he commanded Company I, First Infantry California Volunteers. He never saw active service in the South, but he did learn something of the Colorado desert. He saw in the harsh wilds the beauty and the promise many men have seen.

In 1875 he made a leisurely trip up the Colorado from Fort Yuma to a spot opposite the declining town of Ehrenberg. Here in the tree-shrouded lowlands, William Calloway the dreamer, saw through the eyes of William Calloway the engineer, the place for a man-made paradise. The air was muggy. The land was desc-

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Sphinx of Pyramid Lake

Waters of Pyramid lake in northeastern Nevada are slowly disappearing, and according to Indian legend the day will come when they will vanish entirely. But the great stone figure of the Indian Woman who maintains a lonely vigil over this mysterious sea will remain. She gazes toward the distant mountains and it matters not to her whether the intervening basin is filled with the cool waters of a crystal-clear lake, or covered with the lifeless sands of a parched desert. Marie Lomas has written a charming story about this lake and the odd monoliths and interesting people found on its shoreline.

*Chief Winnemucca, whose family has ruled the
Paiutes at Pyramid lake since the days when the white
men first came to this remote region, greets visitors
with dignified courtesy.*

By MARIE LOMAS

SURROUNDED by the spell of the desert and the mystery of lonely spaces, an ancient Indian woman sits, nameless and silent, on the sunrise shore of Pyramid lake. With quiet dignity, her baskets by her side, she keeps her breathless watch over the stark white pyramid which cuts sharply through the surface of the water to rise to a height of more than 400 feet against the bright Nevada sky.

Through the ages the Indian woman has kept her own counsel. What secrets she holds we can only conjecture, for



like the Sphinx of Egypt, she, too, is of stone.

But secrets there are — secrets that bring a strange sense of foreboding to old Pete Winnemucca, patriarch chief of the Paiutes. It was to his people that this strangest of all lakes was given many years ago. Year in and year out they have watched the mysterious phenomena, the Stone Woman and the Great Pyramid, rising from the bed of the lake. Each season finds them looming larger across the magnificent distance, for they are still rising, growing in beauty and grandeur.

But here in this setting of startling contrasts and striking incongruities, beauty and tragedy are closely linked. And that, the Indians tell us, is one of the secrets known only to the Stone Woman, the secret of the gradually disappearing lake. Little by little the water which once covered the massive monoliths is vanishing and the day will come, according to legend, when all the water will have been absorbed by the desert and the shrouded Indian woman will keep her lonely vigil over the vast expanse of burning sands.

But today, this last remnant of a vast inland sea is one of the most amazing spots on the face of the earth. It was for the sheer joy of delving into its unexplained mysteries, the inevitable lure of the unknown, that only a few weeks ago I crossed the desert to see for myself this strange link with the magic of that age when the world was in the making.

Motoring out from Reno, I followed the winding road to the northeast which leads through the valley between the picturesque Nightingale range and the Virginia mountains, only 26 miles as the crow flies but 38 miles by motor. Except for an occasional sign post indicating trails to ranches hidden by the nearby mountains, Emma Warfield McCormick's "Monte Cristo" and Neil West's "TH," the land appeared uninhabited.

I had no distant glimpse of the lake but came upon it suddenly, dramatically, as I rounded Tule mountain. Here, spread out before me, as blue and sharply outlined as though painted with show-card colors lay Pyramid lake in all its fantastic beauty. And far out, the gigantic pyramid itself cast its weird shadow across the water—a pyramid no less awesome than the ancient sepulcher in the Valley of the Tombs of the Kings in Egypt from which it derived its name.

On the sagebrush dotted shore, the road ended, for the 32-mile lake is entirely surrounded by the reservation of the Paiute Indians. Here I found Chief Winnemucca and his people preserving to the best of their ability, not only their ancient traditions but the countless unexplained phenomena for which the region is famous. Close to civilization on

the one hand, with lands still unexplored by white men on the other, they bridge the gap between the effete present and the colorful, romantic past.

More isolated, perhaps, than many of the tribes, and characteristically aloof, the Paiutes have clung to their folklore and pageantry without any attempt at commercialization. I was not surprised, therefore, to find Chief Winnemucca dressed in full ceremonial regalia, a kindly far-seeing leader of his people with a fascinating sense of superiority toward the outside world. I had come into the Land of the Paiutes to find the Stone Woman, the Sphinx of Pyramid lake, and it was with genuine hospitality that Chief Winnemucca arranged for a guide.

No white man may launch a boat on Pyramid lake, but there are boats enough in the miniature Indian fleet to take the more adventurous on excursions to the far shore. I could have my choice of a sleek white speedboat manned by Avery Winnemucca, who claims to be descended from the famous "Old Winnemucca," high chief in the days when the white man first came to this region, or I might choose a rowboat manned by an ordinary brave.

Since I was in an exploring mood and hoped to be able to land at various points I selected the rowboat and set out first for Anaho Island with its fanshaped beach at one end. This has become the world's largest white pelican rookery. My guide looked as sea-going as any old salt, and with his white duck sailor's cap set at a jaunty angle, he pointed the boat toward the southern end of Anaho.

"The Truckee river flows into Pyramid lake," he explained. "No outlet has ever been found and yet the lake is gradually disappearing."

With that remark from the Indian guide my initiation into the mysteries surrounding this vanishing lake of the desert began.

Along the mountain range on the far side, I could see the shelves worn by the various water levels when Pyramid lake was thousands of square miles in area instead of its present 325 square miles. All around was a kaleidoscopic panorama. The mountainous shore beyond the pyramid and the sagebrush shore we had left, presented ever-changing colors and shadows.

Distances, I learned, were deceiving in this northern desert land where the atmosphere is clear and very little used. What had seemed but a stone's throw to the island stretched into miles, but mere miles have little meaning where the usual



*Above — the pyramid from which the Nevada lake derives its name.
Below — the stone Indian woman with her baskets by her side.*

limitations of time and space are lost in far horizons.

Eventually, the mass of white that a little while before had appeared only as a great bank of snow heaped against the jutting rocks of Anaho, began to resolve into motion—the lumbering slow-motion of thousands of pelicans. Now and then one of the larger birds came floundering in, its beak full of fish. Others took to the air, as slow getting under way as over-loaded seaplanes.

The trout at Pyramid Lake, the guide said, are the largest in the world. A day's catch of 20 or 30 fish often average as much as 27 pounds each, with the larger fish weighing from 35 to 37 pounds. The record catch was a trout weighing 62 pounds.

One of the tragedies of this rare lake is that as the water level falls salinity increases and in time the giant trout are doomed to disappear. With them will go the strange Kuy-yuee, that mysterious prehistoric fish, changed only slightly in the process of evolution and found nowhere else in the world today.

As our boat rounded Anaho, the Great Pyramid loomed directly ahead of us. The guide changed his straight course to a wide arc for the water was becoming warmer and we were close enough now to see boiling water issuing from numerous perfectly shaped spouts near the base of the pyramid.

"At times," the guide explained, "the pyramid becomes a spouting geyser and in the winter it is almost hidden by the steam which envelops it."

But today the pyramid stood out in bold relief, awe-inspiring in its height, an insurmountable structure carved entirely by nature.

Leaving the pyramid behind, our small craft which was more a "ship of the desert" than those which carry passengers out to Egypt's pyramid and sleepy-eyed sphinx, turned its prow toward the shore where we hoped to find the Stone Woman, enigma of the desert lake.

"There is a legend about the Stone Woman," the guide said, and there was that quality in his voice that was reminiscent of Indian song and poetry. "She was once of the race of stone giants known as Stone Coats, an ancient race much older than ours. It was from them that arts and crafts were handed down to the Indians. In passing on their knowledge these Stone Coats always revealed the future."

As he spoke, the gilded rays from the sun broke through between the peaks of a distant range to streak silently across the water like the fiery tongue of an ancient dragon left over from that remote age when reptiles ruled the land. Darting into the thick shadows along the shore it picked up the gigantic figure of

a woman, turning her dark blanket into reds and purples and all the fascinating barbarity of color that is the very soul of the desert.

"There," said the guide simply, "there is the Stone Woman."

The expression in the rugged face was one of repose, the quiet resignation of age and profound knowledge. She had been a part of the romance written into the rocks when this was a sub-tropical land teeming with monstrous creatures, grotesque and weird. It was easy enough now to believe the legend for no doubt this blanket of stone had been wrapped about her by the warm cretaceous sea of sixty million years ago—a sea that teemed with armored fish, sea-serpents and giant crocodiles that lumbered about, killers that left a gory trail in their wake.

Here the Stone Woman was keeping her strange vigil over a land of long ago, a land of reality, not of make-believe. And as the Indian guide had said, she was indeed—a prophet of the future. By her very presence she predicted the

inevitable . . . the disappearance of this last remnant of the sea, Pyramid lake. For only the past two years has the Stone Woman rested upon the shore and even now the water occasionally rises enough to lap about her feet. But it is gradually receding. In time there will be only a vast and weirdly silent expanse of white sand studded here and there with the silver-grays, blues and pinks of the desert flowers that seem to grow without moisture.

Today, an atmosphere of tranquility and peace surrounds this mysterious Sphinx of Pyramid lake, an atmosphere in which I would have liked to linger. But the sun had disappeared behind the mountains that now bowed their lofty heads in the purple shadows. The only sound was the monotonous lap of the oars in the water as the Indian guide turned the boat toward the world of everyday, leaving me content in my knowledge that for a brief moment the door of legend and romance had opened and I had caught a glimpse of the mysteries of another age.

Sez Hard Rock Shorty OF DEATH VALLEY

By LON GARRISON

"Frawgs?" asked Hard Rock Shorty. "Why sure! The best an' biggest frawg legs in the world used to be raised right here in Death Valley. Not only that, they was raised right here in Inferno at that spring up back o' the postoffice."

Hard Rock turned around a couple of times, picked out the shadiest spot on the porch and proceeded.

"Archie Banks was the frawg raiser. He read a book about it an' since it sounded like there wasn't nothin' to do but lug the money down to the bank, Arch sent out for some. Well Sir, the pond around that spring suited 'em just fine, an' with lots o' warm weather to make 'em yell, an' lots o' bugs to make 'em grow, them frawgs spread out like boomers comin' to a gold strike. They done pretty near as good as it said in the book.

"There was one trouble though—Arch had to catch the frawgs, an' it was just too dang much work, Arch bein' one o' them never-sweat fellers. He come pretty near givin' the whole thing up, but decided he'd do a little thinkin' on it first. One day while he was a settin' on the porch appreciatin'



the shade, he figgered it all out. He'd harvest them frawg legs easy. They was gettin' to be worth some money too—about as big around as a pick handle.

"A couple o' University Perfessers'd stored a ice machine at Archie's oncet, an' he took this out an' put refrigerator pipes all around through the pond. Then he just set on the porch some more. Come next frawg harvest, instead o' goin' out an' runnin' down bull frawgs, Arch just waited 'till along in the afternoon when they was all settin' on the bank insultin' each other an' the landscape, an' he starts up his ice plant. He run it along until the pond started to freeze up—was just slush ice. Then he speeded the machine up to about ninety mile an hour an' shoots off his old revolver—Bang! Bang! Bang!

"Them frawgs all give one big squawk, an' one big hop. They dived Ker-splang right into that slush ice, an' all froze in just half way down with their hind legs a-stickin' up out o' the ice. Arch froze the pond up solid an' then he cut all them frawg legs off with a brand new lawn mower he'd ordered from a mail order house."

The detail of the Crucifixion Thorn is reproduced in the accompanying pen sketch exact size. The inset photograph of one of the shrubs was taken in the Hayfields near Desert Center where the Metropolitan Water district of Southern California is soon to create one of its reservoirs.

La Corona de Cristo

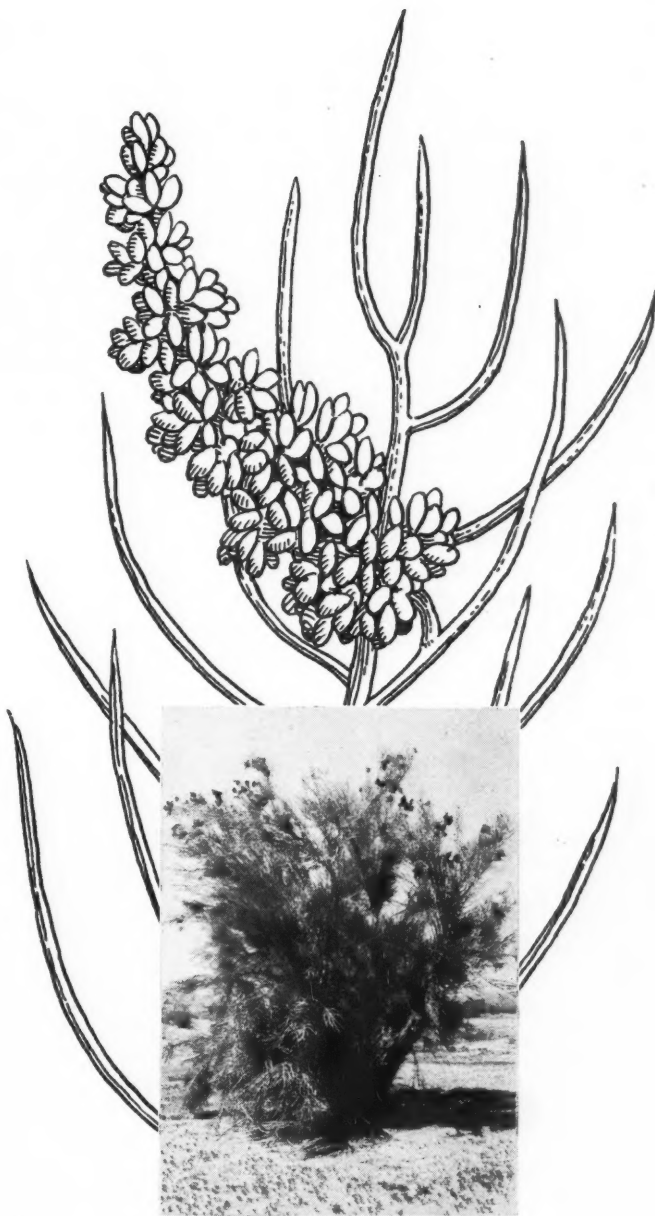
By FRANK A. SCHILLING

DESERTS of the Southwest are hosts to many curious and unconventional plants and shrubs, but none seems to compare with the Crucifixion Thorn, a shrub found on the deserts of Southern California and southern Arizona. Some years ago we were travelling through Pimería Alta, south of Maricopa, toward the Land of the Sunset Sea, when our attention was attracted to a unique shrub a short distance from the road. Our curiosity having been aroused, we stopped to investigate. We found a very thorny shrub, with rigid gray-green branches supporting small twigs ending in very sharp spikes.

Reference to our literary companion, Dr. W. L. Jepson's "Flowering Plants of California," disclosed the fact that the plant had been given the botanical name "*Holacantha emoryi* — Gray," the generic name being derived from the Greek word "*holos*" meaning COMPLETE, and "*akantha*" meaning THORN. Its specific name is derived from that of Lieut. W. H. Emory, engineering officer for Gen. Kearney's Army of the West, who probably recorded it on the expedition to California in 1846. Mexicans call it "La Corona de Cristo" or Crucifixion Thorn, believing that the thorny crown worn by the Saviour, on that fateful Friday when he appeared before Pontius Pilate nearly 20 centuries ago, was made from this plant. There is, however, no evidence that *Holacantha emoryi* was used for this purpose.

The plant is practically leafless, the leaves being reduced to small scales which are shed when the season is over. Small yellow flowers, with seven or eight petals, either solitary or compacted into close clusters, appear on the ends of the branches during the month of August. The flowers are dioecious, that is, they are male and female on different plants. The drupes, or nut-like fruits, have stony seeds with a fleshy or soft covering. They are useless to man, but seem to be relished by that nomad of the desert—the burro.

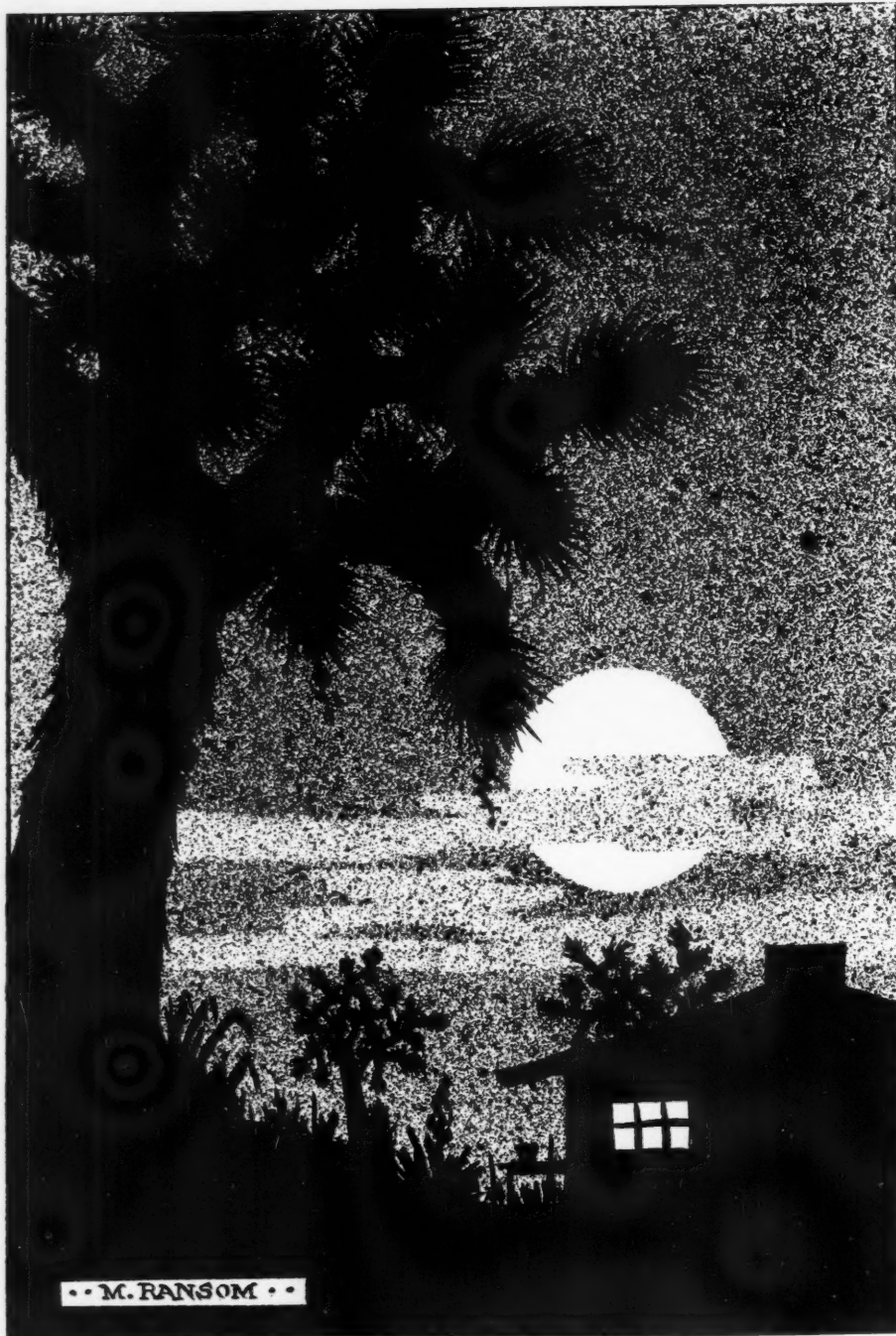
Crucifixion Thorn is found on the deserts of the Southwest in scattered locations from the vicinity of Daggett on the Mojave desert; near Hayfields, the Chuckawalla mountains, west of Calexico near the border, and through southern Arizona almost to Tucson, and it has also been reported from northern Sonora, in Mexico. Dry lake beds seem to be a favored habitat, and it attains a height of from 10 to 12



feet in Arizona, while it is stunted and seldom exceeds eight or nine feet in height in California.

Mother Nature outdid herself when she gave this plant its protective armor. Life on the desert is a continuous battle for existence, for both animal and plant life, each protecting itself against the other. The mesquites, the ironwoods, the acacias or cats-claws, the cacti, and others, also have their protective spines or thorns, but these plants have leaves and valuable fruits to protect, while the Crucifixion Thorn, with nothing but practically bare branches and inedible drupes, or fruit, has the heaviest armor, or thorns, of all. As it inhabits the arid regions of the Southwest, where moisture is at a premium, nature protected the plant against too rapid transpiration of this precious moisture by providing microscopic leaves, or scales, and by giving it a light gray-greenish color.

Crucifixion Thorn is a near relative of Ailanthus, the Tree of Heaven, a large tree introduced from China and which has escaped from cultivation, and is found in central California in the foothills of the Sierra Nevada, near Berkeley and in Solano county.



Out Where the Joshuas Grow

BY MAURICE RANSOM
Victorville, California

I'm headin' back to that desert shack
Out where the Joshuas grow.
"What fer?" ye ask. I'll tell you, son:
That western sky when day is done,
That desert breeze that cools yer brow
And soothes yer weary soul somehow,
Them grotesque shapes that's stragglin'
high
Against a fiery, cloud streaked sky;
They whisper, soft, a desert song
That calls me back where I belong—
Out where the Joshuas grow.

It calls me back, my desert shack,
Back where the Joshuas grow.
"So what," ye say. Well, listen, lad.
These 'things'll make this old heart glad
Out there I'll meet true friends of old,
Not greedy fools whose god is gold.
The air I'll breathe is pure and sweet,
Not smoke and fumes from crowded
street.
For home, a shack with 'dobe walls.
No towering spires and soot stained
halls
Out where the Joshuas grow.

COMPROMISE

BY JULIA ANN ALDRICH
Chandler, Arizona

Two little roistering winds of the desert,
Stubborn as you and as wilful as I,
Met, and the dust of that fateful encounter
Rose, a thin column, to menace the sky.

Let us go east, cried the one who was
stubborn;
West, howled the one who was wilful as I—
And we, who had met in a similar fashion,
Breathlessly wondered which way they
would fly.

Suddenly these little winds of the desert,
Clasping each other with rapturous sigh,
Merged in a tender embrace and flew
southward,
Wedded forever, as you, dear, and I.

• • •

CAMPING

By ADA GENEVIEVE McCOLLUM
El Monte, California

Have you camped out on the desert,
With a campfire burning low,
When the wind is softly sighing,
Blowing white sand to and fro?
Then a coyote's eerie howling,
Brings a thought of wild despair,
And you get that lonely feeling,
When you're all alone out there.

Have you camped high in the mountains,
When the stars shine overhead,
And the soft blue sky above you,
Makes a blanket for your bed?
Here the fragrant scent of pine trees,
Fills your soul with pure delight,
Say, I love to go a-camping,
Just to sleep out overnight.

• • •

THE DESERT

BY ANNA E. WELLS
Ganado, Arizona

The mesas stand—great tables, tall and wide,
Spread scant'ly o'er with cedars, gnarled,
and gray—
Green sage; within the deep-walled canyons
stray
Old burros, and upon the mountain side
Dark boulders stand. I can no longer bide
The somber shades, the dull adobe clay,
The slinking yellow wash, the sandstorm's
fray;
I long for crowds, to battle with the tide
Of human waves. And then I see the sky,
Crimson and gold, a distant sapphire blue;
I watch the mountains turn to deepest rose;
And I forget the throngs that hurry by
When over all the evening twilight glows,
And with the purple mists come peace and
you.

CREED OF THE DESERT

BY JUNE LEMERT PAXTON

Where other shrubs are too timid
to roam,
The Creosote bush will make its
home.
Soldier of fortune in a desert
land,
Handsomely garbed is this
evergreen band.



How the Great Chiefs Made the Moon

As told to
HARRY C. JAMES

There was famine in the underworld home of the ancient Indians, and they became ill and quarrelsome. And so the wisest of the old chiefs called a council and proposed that the tribes seek a new home in the world above. Last month Harry C. James told the story, as recited to him by his Hopi friends — of how the magic of the medicine men enabled the clans to reach the upper-world through a hidden opening in the Grand Canyon region. And now that the Indians have arrived on the surface of the earth they have new problems to solve.

WHEN the people first came up from the villages of the underworld, there was no sun — there was no moon. It was very dark and cold. They looked hard for firewood, but in the darkness they found but little.

One day, as they stumbled about they saw a light in the distance. The Chief sent a messenger to find out what caused it. As the messenger approached the light he found a small field containing corn, beans, watermelons and other foods. All around the field a great fire was burning. Standing nearby was a straight, handsome man around whose neck was a turquoise necklace of four strands. Turquoise pendants hung from his ears.

"Who are you?" the owner of the field asked the messenger.

"We have come from below," the messenger answered, "and we suffer from lack of food and light!"

The owner of the field said that his name was Skeleton. He showed the messenger the terrible mask he often wore, then he gave him some food to eat and told him to guide the people to his field.

When all the people had arrived, Skeleton began to give them food from his field and the people marvelled that there was food enough for all when the crops were so few. He gave them roasting ears of corn, watermelons, squashes and beans. The people built themselves great fires and were happy.

Later Skeleton helped the people to build fields of their

own with fires around them. They planted corn and harvested a good crop.

"Now," the people said, "we should move on to the place where we are always to live."

It was still dark away from the fires. The chiefs had a council together with Skeleton. They decided to make a moon like the one they had enjoyed in the underworld.

They took a piece of well-prepared buffalo hide and out of it cut a great circle which they stretched tightly over a wooden hoop and painted carefully with white paint. When it was quite dry they mixed some black paint and painted all around the edge pictures of the moon, and some of the paint they spread over the surface of the disk. When all this was done, they attached a stick to the disk and placed it on top of a large square of white cloth.

The chiefs then selected a young man and bade him stand on top of this moon symbol. Then they took up the cloth by its corners and began to swing it back and forth, higher and higher as they sang a magic song. Finally, with a mighty heave they threw it upward and the moon disk continued to fly swiftly into the eastern sky.

As the people watched, it suddenly became light in the east. The light grew brighter and brighter. They thought surely that something was burning there. Then something bright with light rose in the east. It was the moon!



Reproduction of John Hilton's "Palm Canyon"

Just an Old Desert Custom

By LARRY WOLMAN

IN a little roadside cabin along U. S. Highway 99 in Coachella valley, California, a strange ritual was observed on New Year's eve. An artist sat before an open fireplace. One by one he picked up the paintings that lay on the floor beside him, stripped the canvas from its frame and tossed the picture into the flames.

It was just an old desert custom—originated by John Hilton many years ago as a method of disposing of certain of his own paintings which found disfavor with his critical eye after they had been completed.

There are always a few friends present at the annual burning ceremony — and they invariably beg John to let them have the discarded art work. But he answers, "No, I am destroying this picture because it is not entirely true to the desert, and I do not wish to have it exhibited bearing my name."

Hilton is truly an artist of the desert. He has dabbled in art work all his life, but it was not until he established his permanent home in the land of smoke tree and sand dune eight years ago that he applied himself seriously to oil paintings.

Once he entered art school—but was bored by the tedious details of class instruction and soon departed—much to the relief of the teacher. Since then he

has studied art in his own way—from books and from the actual work of the masters.

He has developed his own technique. His work is done entirely with a palette knife. "I have found it possible to produce cleaner color and sharper lines with a knife," he explains.

Hilton is 34 years of age, was born in North Dakota, and spent many of his childhood years in China where his father was a missionary. He is interested in many activities. Over the doorway of his roadside stand near Indio is the sign "Hilton's Art and Gem Shop." He is gem collector and cutter, chemist, cactus fancier, writer and musician. He often sits with the singers at the Cahuilla Indian ceremonies, and knows nearly all of their chants.

As an artist his work has been exhibited in Los Angeles, Riverside, Laguna Beach and Palm Springs, and has attracted favorable comment from many sources. His canvases include both Indian character studies and desert landscapes. Mrs. Harriet Day of the Desert Inn art gallery at Palm Springs is giving her studio over to an exhibit of the work of Hilton during the first two weeks in February. The etchings of Henry De Kruif will be exhibited at the same time.

Above everything else, John Hilton's pictures have to be true to the desert—otherwise they are condemned to go up in smoke at the annual New Year burning party.

White Man's Magic . .

Continued from page 5

the same ritual. As nearly as we could gather they thoroughly approved of the work the panting creature did, but they didn't intend to turn their backs on it—the Chindee Machine might reach out and gather one of them into its maw!

One day when Daz Bah was well on the road to recovery she was given a doll to hold in her hands inside the big barrel-like machine. She found lots of pleasure and comfort in the doll and that same day her mother rose from her seat on the floor, fluffed out her six or eight full skirts and departed. She touched her child's face with slender brown fingers as she walked past and trailed her hand along the side of the life saving machine. Weeks passed before she returned to claim her healthy romping child.

We saw or heard no more of Daz Bah until Chautauqua Week late in August. To that assembly came strange Navajos from remote corners of the reservation and made their camps. They had come to see the child brought back to life by the breathing machine! From all over the United States famous doctors and surgeons journey to Ganado to give, that one week, their skill and experience to the Navajo people. They, too, wanted to see the child, so word was sent to Wide Ruins and Daz Bah's mother hitched her ponies to a wagon and came rolling into Ganado. With her came Grandmother of the Trembling Hand. Daz Bah appeared on the Chautauqua stage clinging shyly to Big Doctor's hand and her tribesmen looked and talked. It was one thing to hear about such a 'bringing-to-life' but quite another thing to see the little girl well and rosy and happy with her own people again.

I have a strong suspicion the Medicine Men held some sort of potent ceremony over her when they got around to it. After all, Chindees must be scotched!

Daz Bah again sleeps on her sheepskins in the mother's hogan. She rises with the dawn, carries out the ashes and holds the goat's head while the milking is done. She wraps her warm scarlet shawl about her and follows the sheep over the windswept hills that are home to her. What thoughts, what dreams, what remembrances go with her no one knows.

She is only a little Navajo girl, but saving her life has opened many a hogan door to white medicine and added another legend to those told around hogan fires, the legend of DAZ BAH, the Iron Lung Girl.

Opals at Zabriski . .

Continued from page 11

Some of these tiny gems display as fine an array of colors as any of the precious opals of Mexico or Australia.

We noted another interesting fact. Many of these little stones appeared to have crystalline shapes and angles. Now opal, as all the books will tell you, is a silicious jell composed of silica and variable amounts of water—and never, never crystallizes. Yet here were opals with crystal faces on them. Close examination disclosed that some of these gem stones had round holes in their centers, and there were many crystal-shaped cavities with no opal in them, or with only a thin lining of color.

The answer is that these opal "crystals" are pseudomorphs, or replacements of one mineral after another. The complete story of how this came about would make a fine subject for a thesis in geochemistry. It is possible to reconstruct the general outline of what happened.

The flat topped clay hills of the Zabriski district were once the bed of an ancient playa or dry lake. Erosion slowly is cutting these hills away and the various levels of the lake bottom are exposed on the hillside.

These dry lakes are not always as dry as their name would imply for they catch the cloudburst runoff from the surrounding hills. Soluble salts and minerals from the surrounding highlands are gradually carried down and concentrated in these giant mixing bowls. Water coming from one canyon may bring one type of mineral during a summer cloudburst. A few years later a storm in the headwaters of another canyon may bring to the lake an entirely different mineral that reacts chemically with the first.

Such a series of occurrences no doubt is responsible for both the concretions and the opals they contain at Zabriski. First the concentration of some slightly soluble mineral caused the clay in the lake bed to harden in the shape of weird concretions, and an excess of the mineral formed actual crystals within the newly formed stone. Then came a period of heavy rains which filled the lake for several seasons and so diluted the solutions in the water that the salts which formed in the concretions were dissolved out again, leaving the clay moulds porous with the cavities once occupied by the crystals.

Finally there must have been a period of great chemical activity in the lake during which certain alkaline silicates were broken down to form silicic acid or silica jell which found its way into the cavities and slowly dried to opal. This process must have been repeated several times with slight variations during the history of the lake for there are several layers of opal bearing concretions as well as some which do not contain opal.

Since that first hot trip to Zabriski I have visited the locality many times and have always felt well repaid for the effort. Recently my wife and I made the trip and enjoyed it immensely. The entire route is now paved and the new highway from Baker to Shoshone passes closer to the opal bearing hills than did the old road. The borax well still flows, but the state highway department has drained the water off into the desert on the other side.

Overnight accommodations are available at Baker and Shoshone and the visitor should plan to see Death Valley on the

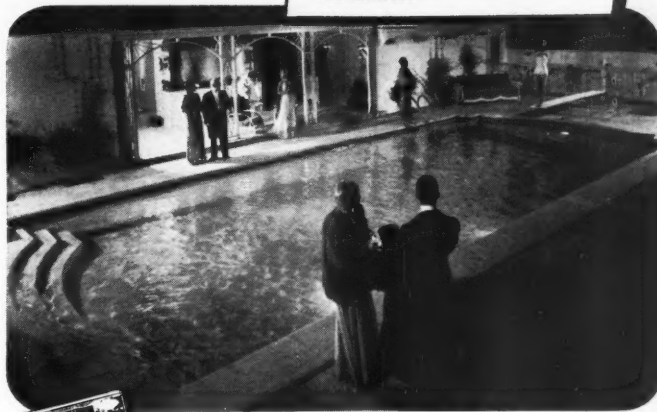
same trip since it is only an hour and a half's drive beyond. This trip can be made in one day from Barstow, but of course more time means more enjoyment.

I believe I am safe in saying that this is the only place in the world where an inexperienced collector can pick up bits of gem opal within 300 feet of a paved highway.

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Here and There

... ON THE DESERT

ARIZONA

Phoenix . . .

For the first time since the Boulder dam project was started, Arizona was lined up with her six sister states of the Colorado river basin when delegates to a seven-state conference here put their OK on a pact for financial operation of the great dam. The proposal will be offered at the next session of congress as an amendment to the Boulder canyon project act. Agreed: power contractors will begin in 1940 payment of \$500,000 into a separate fund, for first three years to be used in a comprehensive survey of the Colorado river basin, thereafter to be allocated to upper basin states until June 1, 1955. Arizona and Nevada, beginning in 1940 will receive annual payments of \$300,000 each for a period of 47 years. Interest rate on construction cost of the Boulder canyon \$130,000,000 project will be reduced from 4 to 3½ per cent or less and power rates at the dam will be cut from 1.63 mills per kwh to 1 mill.

Willcox . . .

Death in December took Col. W. T. Webb, owner of the 76 ranch and cattle company, one of the most extensive properties in southern Arizona. Col. Webb was 73 years old, identified with the cattle industry half a century. His Arizona residence dates from 1881 when he moved to Tombstone, later going to Graham county. He was one of the state's first presidential electors, served in the territorial legislature, once as speaker of the house.

Phoenix . . .

Collection of more than \$300,000 inheritance taxes on the estate of Lemuel C. Shattuck, Bisbee banker and president of the Shattuck Denn Mining company, put the state of Arizona on a cash basis for about nine days in the new year, according to Harry M. Moore, state treasurer. School disbursements of \$500,000 for the first quarter called for resumption of war-tant issue.

Yuma . . .

Water holes will be developed in the Kofa mountains of Yuma county as first step toward restoration of bighorn sheep. Work will be carried out under direction of the department of the interior, employing a CCC corps of Indians, second crew of its kind in the United States. Officials believe the bighorns have become almost extinct because of scarcity of water and illegal hunting.

Hotevilla . . .

In this little Indian village of northern Arizona there was no such thing as Christmas. Its people are irreconcilables who have steadfastly refused to accept white man's ways. In other nearby Hopi settlements and throughout the reservation the Indians exchange gifts, celebrate December 25 after the fashion of the whites, but Hotevilla says no.

Wickenburg . . .

Bob Storms, local j. p., believes in advertising. He has put up a seven-foot red Neon sign, surmounted by two overlapping hearts pierced with an arrow, letters in blue telling the world: "Justice of the peace—marriage licenses issued and the knot tied."

Tucson . . .

"New York, too many people, too much noise, I come home," explained Sgt. Sinew L. Riley, Apache Indian scout, getting off a plane in Tucson as he returned to Arizona five days ahead of schedule after appearing in "We, the People" radio program. He didn't think much of New York chow either, but he liked Kate Smith who sang a patriotic song on the same program. Sgt. Riley with the 25th Infantry at Fort Huachuca, Arizona, is one of the few remaining Indian scouts attached to the United States army. Riley's father and grandfather, also Apache scouts, had been instrumental in capturing Geronimo.

Payson . . .

David Gowan Goodfellow, 78, died in December at his farm home, the famous resort at Goodfellow's natural bridge. A tailor from Scotland who traveled half round the world 45 years ago to occupy a prospector's cabin atop the great bridge. Goodfellow developed here a place today known to notables of many nations.

CALIFORNIA

Blythe . . .

Blythe, highway 60 entrance to California, led the entire state during November in incoming automobile traffic, the state border quarantine division has reported. Ten thousand passenger vehicles checked into the Blythe station during the month carrying a total of 25,937 passengers. Yermo was in second place.

Death Valley . . .

Sorrowfully alone in the solitude of the desert rocks, Death Valley Scotty mourns the closest companion, his favorite old pack mule, Slim. Slim at 40 fell victim to a mountain lion. Scotty claims the veteran of the trails has packed a million and a half in gold ore and that he rode the animal 28,000 miles over rocky trails. When the faithful servant was found one morning with a broken hind leg, Scotty was unable to administer the coup de grace. His partner put Slim out of his misery.

Palm Springs . . .

The status of more than a thousand property leases given by Indians to whites, leases now declared illegal, is expected to be cleared up following arrival from Washington of two federal officials. H. E. Shipe, assistant director of the division of irrigation, and C. E. Faris, representing Commissioner John Collier of the Indian bureau, are visiting H. H. Quackenbush, in charge of the Palm Springs reservation. Since allotments of land made to individual Indians were declared illegal in a federal court ruling last July, and all the reservation is now tribal property, leases given to whites by Indians are void.

Big Pine . . .

Pheasants, partridges, valley quail and wild turkeys — 50,000 of them — were released in the state during 1938 to provide sport for game lovers, the fish and game department has announced. Many of the game fowl planted were freed in Inyo county, there to breed and increase.

Needles . . .

J. G. Brown, veteran business man of Needles, recalled early history of this section, steamboating on the Colorado river, and pioneer experiences in railroading for Rotarians at a recent club luncheon. Needles came into existence in 1883 when the Southern Pacific railway company built into the Colorado river valley and met the Atlantic and Pacific railroad, extending west from Albuquerque, he stated. He said the first steamer was used on the Colorado in 1850 to provide supplies for United States soldiers on duty near Yuma to protect immigrant trains from the Cochon Indians. Early mining equipment was also brought by boat.

Blythe . . .

Founder of Blythe's first postoffice and still its postmaster is P. D. McIntyre who has just completed his thirtieth year of service at the same stand. Members of the Blythe Lions club and patrons of the postoffice recently honored McIntyre with a dinner and presented him with a watch "in appreciation of 30 years' service, from patrons of the Blythe postoffice." McIntyre established the postoffice December 26, 1908.

NEW MEXICO

Farmington . . .

San Juan county ranchers and livestock men have banded together in an organized group to oppose further extension of the Navajo reservation boundaries, it is reported. They plan to protest action of the Indian bureau in taking up private and public lands for inclusion in the reservation.

Madrid . . .

Each Christmas for 13 years the miners of Madrid have pooled their savings and for the Christmas season briefly lifted the sooty face of this remote, isolated mountain mining camp to shining beauty. This Christmas again cedar fires glowed from the peaks of the Artiz mountains, twinkling beacons of Christmas cheer and goodwill. It was Madrid's annual traditional Christmas greeting to a faraway outside world. So famed has become the camp's display that thousands of motorists annually wend their way over the dusty, winding mountain road 40 miles from Albuquerque to partake of Madrid's yuletide cheer.

Zuni . . .

The feast of the Shalako, annual December ceremony of the Zuni Indians, took on special significance this year when the Zunis of this fabled Indian village called to the gods for rain and snow to break a drought imperiling their crops and livestock. Devout tribesmen consecrated themselves anew to toil, patience and kindness, as weird masked figures of primitive deities entered the pueblo for the feast. The ceremony is a Zuni combination of Thanksgiving and New Year, cloaked in symbolism which no white man fully understands. It takes its name from its central figures—six Shalakos, or divine messengers, who enter the village at sundown. They are picked men of the tribe. Nearly 2000 visitors doubled Zuni's normal population.

NEVADA

Las Vegas . . .

Establishment of a boat factory in Las Vegas has been promised by O. C. Hull, president of the Hull-Kaymo Boat company. This will be the first industrial development in southern Nevada resulting from formation of Mead lake behind Boulder dam.

Boulder Dam . . .

With a new total of 210 species of birds recorded here, Boulder dam recreational area now lacks only 10 of reaching the record claimed by Yellowstone national park. Yellowstone, with 220, is reported to have more different kinds of birds than any other national park. The Boulder total was raised from 197 to 210 on a recent study of water fowl using the lake as a haven on migrations. Located on one of the major "flyways" for migratory birds, the Boulder dam area is expected to become one of the leading wintering grounds for the winged travelers. The biological survey of the federal department of agriculture is planning to spend \$100,000 for development of feeding areas. Sufficient feed is now lacking.

Carson City . . .

A collection of 1500 volumes of old and new Nevada newspapers, some containing the writings of Mark Twain and Dan de Quille, is now on file in the Nevada state library at Carson City. The collection dates from 1864, when a copy of the Carson City Daily Appeal was installed as copy No. 1 in Volume No. 1. Students, writers and others in search of historical material about Nevada are welcome to consult the files.

Reno . . .

Reno is sharing its divorce business with other cities in Nevada, but the state is not suffering from competition of liberal divorce laws adopted in Florida, Arkansas, Idaho, Wyoming and other states. This conclusion is drawn from statistics of State Health Officer John E. Worden, compiled for 1938. Although divorces in Reno dropped five per cent, Las Vegas, Carson City, Elko and Virginia City registered distinct gains.

Winnemucca . . .

President Franklin D. Roosevelt is soon to be presented with an Indian war bonnet, once owned and worn by Chief Winnemucca, father of the City of Winnemucca. Chief Winnemucca was one of the most colorful Indian figures in Nevada's early history. He is held in high esteem by all Indians of the state. Dewey Sampson, first Indian ever to serve in the Nevada legislature, is preparing the war bonnet for shipment to Washington.

UTAH

Cedar City . . .

By order of the state fish and game department approximately 80 deer have been killed in the past few weeks in the foothills near Parowan. Overgrazing in the district was responsible for the order. Deer have starved in this locality during recent winters and many of them caused much damage to farmers' fields and haystacks.

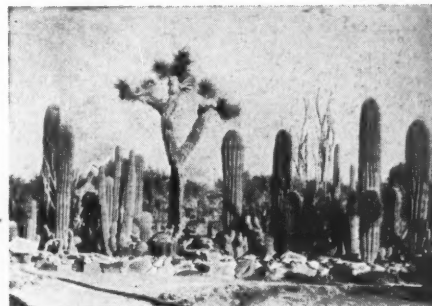
Delta . . .

Matt Warner of Price, last of the Butch Cassidy gang of outlaws and bandits, is dead. Matt turned peaceful after serving time in prison and a pardon. He was a candidate for sheriff a few years ago. He was 74 when he died. A local paper says Matt is reported to have "got on a bender" after a dispute with an author, and that his 74 years couldn't stand the strain.

Vernal . . .

Revenues accruing to the state from leasing grazing land during the year 1938 amounted to \$83,381.95, which was divided between the eight grazing districts. The money will be spent for fencing, watering places, planting trees and grass and work to arrest soil erosion.

IMPERIAL COUNTY FAIR



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For further information or premium lists, write D. V. Stewart, Secretary, Imperial County Fair, Imperial, California.

Navaho Twins

landmarks in the Mormon state. Charles Kelly of Salt Lake City is the winner of the prize offered by the Desert Magazine in December for the best letter identifying and describing this landmark. Kelly's story is printed below.



By CHARLES KELLY

THE picture reproduced in your Landmarks contest is a view of the cliffs along the San Juan river at Bluff, Utah, and the formations are known locally as the "Navaho Twins."

Originally there were four identical formations in a row, but two were blasted off one Fourth of July to provide a spectacle for the Mormons and Indians.

As the base of the cliff, just to the right of where the photographer stood is the casing of an old well originally drilled for oil, but which now produces cold water 99.44 percent pure, used in automobile batteries all over that section of Utah.

Here at the base of these Navaho Twins rested the famous Mormon emigrant train known as the "Hole-in-the-

Located near Bluff, Utah, the buttes shown in the accompanying picture are one of the well known

Landmarks in the Mormon state. Charles Kelly of Salt Lake City is the winner of the prize offered by the Desert Magazine in December for the best letter identifying and describing this landmark. Kelly's story is printed below.

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Utah. Only one of the original cabins of that party remains standing.

In the course of time the colony became prosperous through cattle raising. Bluff once boasted more wealth per capita than any other community in the state. But sheep killed the range and all but two or three of the residents moved away. Since then the river has washed out most of the tillable acres, leaving the Navaho Twins practically the sole guardians of this wide spot in the river bed.

This spot was the ancestral home of old Posey, last chief of the southern Utah Utes, who was killed in the last Indian "battle" in the United States.

Bluff is 350 miles south of Salt Lake City and 50 miles northeast of Monument valley on State highway 47, in the southeast corner of Utah.

The first oil well in Utah was drilled here at the base of this cliff. Dozens of wells have been drilled since, but the field has never produced more than enough to supply local cars which once used crude in their tanks without refining.

Here at Bluff old Hoskaninni, the only Navaho chief unconquered by U. S. troops, did his trading after the Mormons came in. In those days this formation on the San Juan river marked the dividing line between Ute and Navaho territory.

Weather

DECEMBER REPORT FROM
U. S. BUREAU AT PHOENIX

Temperatures—	Degrees
Mean for month	55.9
Normal for December	52.0
High on December 8	82.
Low on December 26	35.
Rain—	Inches
Total for month	1.14
Normal for December	1.00
Weather—	
Days clear	13
Days partly cloudy	8
Days cloudy	10

G. K. GREENING, Meteorologist

FROM YUMA BUREAU

Temperatures—	Degrees
Mean for month	58.0
Normal for December	55.2
High on December 7	83.
Low on December 28 and 29	38.
Rain—	Inches
Total for month	0.88
69-year average for December	0.53
Weather—	
Days clear	18
Days partly cloudy	8
Days cloudy	5
Sunshine 77 percent (239 hours out of possible 311 hours).	

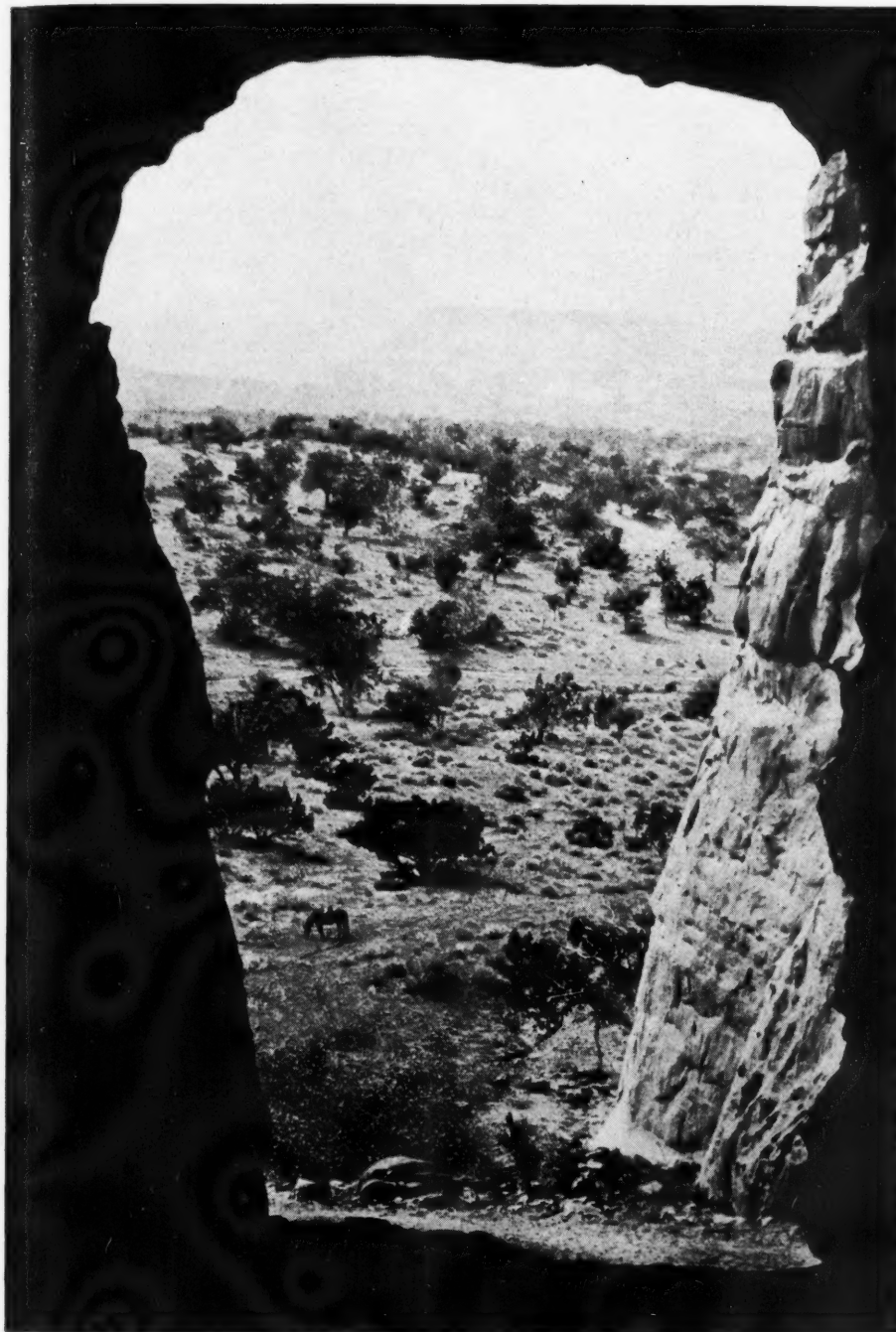
COLORADO RIVER—December discharge at Grand Canyon 217,280 acre feet. Discharge at Parker 194,460 acre feet. Estimated storage January 1 behind Boulder dam 22,560,000 acre feet.

F. C. CROMBIE, Meteorologist.

The DESERT MAGAZINE

CAVE IN NEW MEXICO!

Who can identify this well known landmark?



... LANDMARKS CONTEST ...

In northeastern New Mexico not far from the Arizona boundary is a cave of historical interest. This cavern played a part in one of the incidents of the warfare between the United States government and the Navajo Indians.

In order that readers of the Desert Magazine may know more about this cave and the history connected with it a \$5.00 cash prize will be awarded the reader who identifies the spot and sends in the best descriptive article of not over 500 words.

The location of the cave should be given, relative to towns and highways and railroads. Also exact directions for reaching it, a description of the rock formation and desert landscape in which it is found, and all possible historical data.

All entries must be in the Desert Magazine office by February 20, and the winning answer will be published in the April number. Address answers to Landmarks Department, Desert Magazine, El Centro, California.

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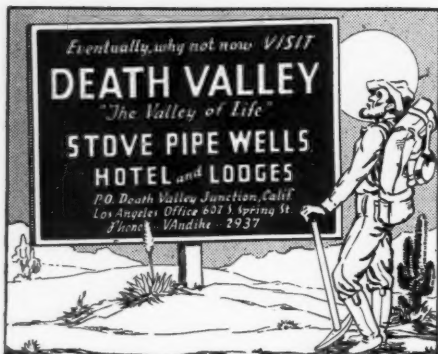
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THE **Desert** MAGAZINE
El Centro, California

DESERT PLACE NAMES

Compiled by TRACY M. SCOTT

For the historical data contained in this department, the Desert Magazine is indebted to the research work done by Miss Scott; to the late Will C. Barnes, author of "Arizona Place Names;" to Frances Rosser Brown of New Mexico and to Hugh O'Neil of Ogden, Utah.

ARIZONA

BANGHARTS Yavapai county

Stage station on road between Ash Fork and Prescott, where stages stopped for meals. The presence of Banghart's attractive daughters made this place very popular. Located in 1866 and owned by George Banghart. Now called Del Rio, on A. T. & S. F. rr. Said to be location of Postle ranch where first territorial capital was set up. First called Chino. Governor Safford visited Banghart's in 1873 and mentions the visit in his report for that year.

FREDONIA Coconino county

"Name suggested by Erastus Snow because many of the residents were from Utah seeking freedom from federal laws against polygamy." Most northerly town in Arizona, about 3 miles south of Utah line. Settled 1865 by people from Kanab. W. G. Mann, forest service, Kanab, wrote to Will C. Barnes: "According to local authorities, Mormons living in Kanab, Utah, sent their extra wives across the state line to Fredonia to make it hard for U. S. marshals to find and arrest them. The name is a combination of 'Dona'—a woman—and free. Said to have been first called Hardscrabble."

MINGVILLE Graham county

Named for "Big" Dan Ming, prominent cattleman and politician. His cow ranch was in Aravaipa canyon. Summer in 1885 and preceding winter had been very dry all over southern Arizona. Cattlemen held a meeting at Willcox. Some wag suggested Ming be invited to open with prayer. Ming offered this plea: "Oh Lord, I am about to round you up for a good plain talk. Now Lord, I ain't like these fellows who come bothering you every day. This is the first time I ever tackled you for anything and if you will only grant this I'll promise never to bother you again. We want rain, good Lord, and we want it bad, and we ask you to send us some. But if you can't or don't want to send us any, for Christ's sake don't make it rain up around Hooker's or Leitch's ranges, but treat us all alike. Amen." From Range News, Willcox. Ming died in San Francisco in November 1926, age 84.

CALIFORNIA

SKIDOO Inyo county

Old mining camp in the Panamints. Established by John Ramsey and others, about 1906. The word, popular at that time, means "get outta here."

STOVER MOUNTAIN Riverside county

Christobal Stover arrived in the district with Louis Rubidoux and ran cattle here in 1842, on a claim he had taken up. He became a famous bear hunter, in his old age once went after a granddaddy bear and was dreadfully clawed. From these wounds he later died. Indians called the mountain Ta-hual-tapa, or "the raven mountain" because so many crows or ravens congregated and nested there.

PALA (pah'lah) San Diego county

Sp. "tree trunk" or "tree bole." Indian word means water. Drury says Pala means "shovel-shaped," referring to the valley in which the village is situated. Mostly settlement of Pala-tin-gwa tribe, evicted from Warner's ranch in 1903.

KOIP

Mono county
Peak named by Willard Johnson, U.S.G.S. in 1883. Ele. 13,300 ft. Mono word *koi-pa* means mountain sheep.

MASSACRE CANYON Riverside county

A few miles north of San Jacinto. According to Drury it was the site of a fierce battle waged over a food supply of wild grain, by the Ivahs and the Temeculas. The Ivahs lost and were all killed, either by weapons or by being driven over a cliff in the canyon.

NEVADA

CHURCHILL county

Organized in 1861. Named from Fort Churchill, which in turn was named after an officer in the U. S. army.

MOUNT ROSE Washoe county

Location of U. S. observatory. Named by Miss Rose Hickman of Washoe City.

ESMERALDA county

Formed in November 1861. Sp. for emerald. Mines opened there in August 1860.

RALSTON VALLEY Nye county

Named for Judge James H. Ralston, who died from starvation and exposure there in May 1864.

NEW MEXICO

LAS CRUCES (lahs kru' ses)

Dona Ana county

This site was a landmark on the trail between Santa Fe and Chihuahua long before the town was founded. Known as Las Cruces (the crosses) because of the number of crosses marking graves of traders and travelers who had been killed in this vicinity by Apache Indians. Locations of some of these crosses are now fixed as being at Lucero Mill, on North Alameda, on lower Main street where the arroyo comes into town and on upper Main street. Town took the name of its site when founded in 1849 by a colony of about 100 Mexicans who asked U. S. soldiers stationed north at Dona Ana to make the first survey. Railroad came in 1881 and immediately the land office, court house and several hundred people moved over from Mesilla. Legislature passed an act in 1882 establishing Las Cruces as the county seat of Dona Ana.

UTAH

BICKNELL Wayne county

When Thomas W. Bicknell made an offer of a library to any Utah town which would change its name to Bicknell, the citizens of Thurber accepted the offer and changed the name of their town in 1914. Bicknell soon after donated a library of 1,000 books to the town, and these volumes have been placed in the Wayne High school at Bicknell. George C. Brinkerhoff was instrumental in the change of name.

GUNLOCK Washington county

In a train of emigrants one member was especially good at fixing gunlocks and they dubbed him "gunlock." Sent out to settle the lower country, a group from this train selected a site and established a tiny village on which they bestowed the name in honor of their gunsmith.

The DESERT MAGAZINE

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stained Calloway's shirt, but the bullet missed its mark. Calloway answered with a rifle shot, and the Indian dropped dead. Another Indian, a renegade Apache known as "Big Bill" seized Calloway from behind and stabbed him through and through. Calloway crumpled to the ground in front of his tent dead. The Indians, inflamed by the sight of the two dead men, went on a rampage. They tore open the sacks of sugar and flour and scattered the provisions around and set fire to the tent after first looting Calloway's body of its clothing. Then taking his pistol and rifle and other items they fled.

Among the men who witnessed the crime was Pancho, a Mojave who was a friend of Calloway.

Seeing Calloway fall, Pancho sent his son Panchito post haste to the upper camp where the youngster arrived sobbing just as Irish was sitting down to his midday meal of brown beans.

"He dead, heap dead, you come!" cried Panchito.

"Who's dead?" asked Irish.

"Señor Calloway, heap dead. Indian kill Señor Calloway. Bad Indian kill him. Heap dead. You go."

Scouts Recover Body

Irish immediately saddled his pony, rode to one of the ranch camps nearby and enlisted the help of two former government scouts who were working on the project. These men told Irish to barricade himself in the home ranch while they went with a wagon for the body. The Indians had vanished and the two men found the camp in ruins and Calloway lying near the smoking ridge pole, his head almost in the fire.

It was a sorrowful group next day that laid away all that remained of William Calloway in a home-made coffin constructed of the mahogany fittings from one of the abandoned buildings of Ehrenberg.

Headed by Irish, the tiny funeral cortege drove down the bed of a dry slough, which was to be the main canal, until they came to a small symmetrical mesquite tree about eight feet high. Here, just a few days previously Calloway had said to Irish:

"George, if anything ever happens to me on this job, here is where I want to be buried. It's such a beautiful tree."

There, to this day in an unmarked grave lies all that remains of William Calloway, the man who made possible Thomas Blythe's dream.

As soon as possible Irish communicated with the authorities. A detachment of U. S. troops arrived from Fort Yuma and camped on the edge of the lagoon. Later "Big Bill" was captured by Indians, and sentenced to Alcatraz. Later

still he was released and returned to the river where he died soon afterward.

After Calloway's death, the work halted until a new engineer, C. C. Miller, father of the late Frank Miller of Riverside, was hired to carry on. One of Blythe's first actions upon receipt of the news of Calloway's death was to provide for the latter's widow and children.

In November 1882 Blythe visited the project. The main canal was nearly finished. Soon the water would be upon the lands. Then the settlers would come. Flat-bottomed barges would float down the river laden with produce and the settlers on the Mexican grant would profit by the Palo Verde project. Irish was to drive down into Mexico and take charge of that great undertaking.

Dream of Empire Vanishes

On the evening of April 4, 1883 Thomas Blythe was stricken with a heart attack and died lying on the floor of his home, his head in Edith's lap.

Gone then was the dream of empire. The hundreds of thousands of Mexican acres remained tenantless under the fierce desert sun. The railroad to lonely Port Isabel on the Colorado was never built, levees never finished. Irish hastened to San Francisco at Blythe's death to offer his aid in straightening out business affairs. Work on the Palo Verde project ceased abruptly. The estate was thrown into litigation. Attorney Hart brought little Florence Blythe and her grandfather from England. Hordes of applicants for the Blythe fortune arrived and the battle for the desert empire began. Year after year the fight went on until finally in 1904 the courts awarded the Palo Verde lands to Florence Blythe, legal heir of Thomas Blythe. The Mexican lands were lost by default.

George Irish, now the sole living actor in that early river drama, after giving his testimony at the trial went to Elsinore and took up ranching. He was married in September 1887 to Miss Kate Varnum. On 500 acres purchased from the estate of Don Juan Machado they lived for 12 years. Then they moved to San Diego where Irish became a photographer. Of their family of three children, Cecil and Amie now live in Los Angeles where Mr. and Mrs. Irish also reside.

Today, the events of 60 years ago are as clear to Mr. Irish as though they had happened but yesterday. To him, I am indebted for the vivid word picture of the stirring events that took place in the Palo Verde valley so many years ago. Similarly I am indebted to Arvin B. Shaw, Jr., of the law firm of Stewart, Shaw and Murphy of Los Angeles, for generous assistance in furnishing me with the court records of the Blythe litigation, from which a majority of the intimate details of Blythe's life were obtained.

On Manly's Trail . . .

Continued from page 8

"Stover Narrative," and found therein this entry:

"We were here I think three days.

We had a very sick man and he died and we buried him in as good style as the circumstances would allow. We broke up again; those that had ox teams went up ten miles to cross the canyon; the horse and mule teams made pack saddles out of our wagons. We called this place Mount Misery."

Altogether about a dozen wagons were abandoned at "Mount Misery." By reading Bigler's entries, Wood identified "Mount Misery" as the high ridge east of the Bowers ranch at the head of Beaver Dam wash. The wagon irons he had seen there 30 years before, were those of the Death Valley party, although he was not aware of the connection.

With directions given us by Wood, we drove back toward White Rock wash, but before reaching the rim, turned on a very dim trail which soon led us to the brink of the wash. Straight down it ran, apparently into the bowels of the earth, the longest, steepest, narrowest trail we had ever encountered in many years of desert travel. Down, down, and down we went at a snail's pace, finally reaching a small meadow containing an abandoned cabin. Walls of the canyon were of white volcanic ash, so we scrutinized them closely for names. At last to our joy we found deeply engraved the name "OSBORN 49." We then knew we were on the trail of the 49ers. We might find the inscription Bigler said he made!

No other early names were found at the "ranch," so we started walking up the canyon. Within a quarter mile we found another meadow "of about 50 acres," which seemed to correspond to the place where Bigler's party had grazed and rested their horses. Above, the canyon narrowed, so we knew our only chance was to search the rocks in that vicinity.

Korns, eager to locate the irons of the abandoned 49er wagons, began climbing the steep canyon wall. Beckwith followed the base of the white cliff, scrutinizing every rock, but found no traces of names or dates. I kept on up the canyon, sweeping the rocks with field glasses. Most of the rock surface was too coarse-grained to tempt anyone to carve his name, and the search seemed useless. At last, just before turning back, I discovered through the glasses a small surface of much finer grain. "If there are any old names in this canyon," I said to myself, "they will be on that rock."

Breaking through the sagebrush and bushes at the base of the cliff, I glanced

along the smooth surface and almost the first thing that met my eye were the dim but perfectly legible letters "H. W. B." carved in the center of a smooth panel, seven feet from the ground. I had found the needle in the haystack.

At my shout Beckwith came up, but could not be convinced that I had found Bigler's initials until he saw them for himself. Korns, on top of the ridge, was persuaded, after much yelling, to descend.

The letters are about six inches high, and were originally very carefully and deeply cut, but have been severely eroded during the intervening 89 years. The

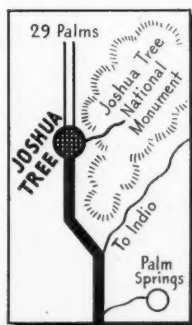
date, which Bigler says he cut along with his initials, is so far gone that it does not show in the photograph, only traces of the figures remaining. But the finding of these initials vindicates the accuracy of his old record and indicates clearly the route of the 49ers after they left the Old Spanish Trail.

The old wagon irons, which we failed to locate in the dense cedar growth, but which have been seen by several Nevada pioneers, prove definitely the location of "Mount Misery" and the point where

Continued on page 43



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BOOKS OF YESTERDAY AND TODAY

—a monthly review of the best literature of the desert Southwest, past and present.

NEW ARIZONA BOOKS GREET ARRIVAL OF 1939

From Harvey L. Mott's "Arizona Bookshelf" column in the Arizona Republic comes information regarding two new books that will be of special interest to desert dwellers.

HOPI KACHINAS, by Edwin Earle and Edward A. Kennard, is just off the press of J. J. Augustin, New York. Here is presented in text and illustration the most exhaustive study yet published about those colorful images which play so significant a role in the lives of the Hopi Indians.

Dr. Kennard wrote the text, telling in simple language the vivid drama of the kachina cult as expressed in ceremonial dance, in costume and in symbol. The 28 brilliant color plates are selected from more than 100 paintings made by Edwin Earle during many months' residence at Oraibi.

For fiction readers Clarence Budington Kelland's ARIZONA announced for January publication, is expected to be one of the literary highlights of 1939. Kelland has made long preparation for a novel that will be highly accurate and informative. The volume will be the first of what ultimately will be a trilogy telling the story of the state from its early settlement until the present.

ARIZONA HUMORIST WRITES ABOUT BOULDER DAM AREA

Reg Manning's CARTOON GUIDE TO ARIZONA which came off the press less than a year ago proved to be such a "best seller" that J. J. Augustin, publisher, asked Manning to go to Boulder dam and prepare a guide of the new recreational area there.

And now Manning's CARTOON GUIDE TO THE BOULDER DAM COUNTRY has just come from the printers—with all the essential information about the world's greatest dam and artificial lake sandwiched into 50 pages of original Manning comic art and wise-cracks.

"Boulder dam," explains the author, "is Man's attempt to reform that notorious outlaw of the Southwest 'Ol' Two Gun' Colorado river."

"Dozens of sites for the proposed prison (for Two Gun) were suggested but in the end it boiled down to two—Boulder canyon and Black canyon. So they compromised—they built the wall in Black canyon and named it Boulder dam."

Manning's book has the rare merit of

being genuinely funny without the slightest sacrifice of accuracy. He tells the whole story of the construction, and of the many scenic wonders of the recreational area surrounding the new Lake Mead in a series of word and pen pictures which leave few questions unanswered.

A visitor might spend many days in the vicinity of Boulder dam without getting half as clear a picture of the great project as may be obtained from an hour with Manning's guide. After once reading the book, a visit to the dam is very likely to be moved into No. 1 place on the list of future vacation trips.

GEN. PERSHING WORKING ON BOOK AT TUCSON

General John J. Pershing, resting this season in a cottage on the edge of the desert near Tucson has resumed work on his autobiography which he hopes to complete this winter. Gen. Charles G. Dawes, former vice-president of the United States, will be the general's guest on the desert later in the season.

NEW BOOKS ..

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ON MANLY'S TRAIL . . .

Continued from page 41

part of the Death Valley Party left their wagons and continued by pack train. This spot is four miles from the head of Beaver Dam wash.

Bigler and the pack trains had traveled down the bottom of the canyon. The wagons, unable to get down into the canyon, continued along the ridge above and to the east until they found it impossible to proceed further. Most of the wagons, including those which Manly accompanied, turned back to the rim and found their way out of the difficulty by dropping down into Clover creek, eventually reaching Meadow Valley wash near Caliente, Nevada.

After great difficulty, Bigler's party finally left Beaver Dam wash, which ran directly south, and turned west across Mormon Mesa to approximately the site of Carp, Nevada, where they struck the Muddy, continuing down it to intersect the Spanish Trail near what is now Glendale. Manly, Bennett, Arcane, the Jayhawkers and many others took a route from the Muddy leading due west; but since there is no known day-by-day journal of their travels from that point, it is doubtful if their exact route will be definitely traced. The finding of Bigler's initials, however, provides a starting place for anyone who cares to finish tracing the old trail of '49.

DECEMBER WINNERS IN PHOTO CONTEST . . .

Fred Hankins of Taft, California, won first place in the December camera contest sponsored by the Desert Magazine. His picture of Montezuma Castle, Arizona, appears on the cover of this number. This photo was taken with a 5x7 Eastman View camera, 1/10 second at f32, Panatomic film, no filter, at 3:00 p. m.

Second place winner—was Charles Webber of San Leandro, California, whose wildflower picture is to be used in a new department scheduled to appear in the Desert Magazine next month.

In addition to the prize winners, the following photographers submitted work of special merit: Juanita Schubert of Azusa, California; LaVell Cooley of Long Beach, California, and Clarence Tansey of Tujunga, California.

DEATH VALLEY GUIDE TO BE PUBLISHED . . .

"Death Valley Guide," produced by the Federal Writers Project in northern California and being published by Houghton Mifflin, will contain complete information on trails and roads in this national monument, as well as giving its fascinating history and a description of its varied scenery and ghost towns. Customs of the 50 Shoshone Indians who still live in Death Valley are told.

The Desert Trading Post

Classified advertising in this section costs eight cents a word, \$1.60 minimum per issue—actually about 10 cents per thousand readers.

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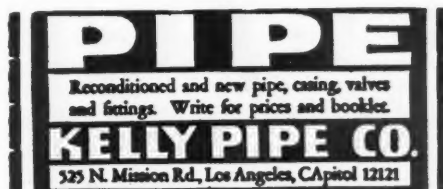
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By RANDALL HENDERSON

NEW YEAR'S eve I camped in a broad sandy arroyo just below that narrow slit in the Vallecito range known as Split Mountain canyon. This is one of the many scenic landscapes in the new Anza State Desert park. Visitors have been going to this region in large numbers during the past year as a result of the publicity given to the native elephant trees found in this vicinity.

Friends were there with me and we gathered driftwood and barbecued our steaks over an open fire. There are two advantages in that kind of a camp dinner. It not only makes an appetizing meal, but the steaks can be served in sandwiches, with coffee in paper cups—and there are no dishes to wash.

After the meal was over we sat in a circle around blazing logs and listened to Dr. S. U. Sverdrup of the Scripps Institute of Oceanography of La Jolla tell of his experiences with Amundsen in the icy deserts of the Arctic region.

A dark shadow—a little desert fox—circled the camp just beyond the glow of the fire. We caught a fleeting glimpse of him at times. Later in the night when we were snug in our blankets he raided the commissary. But he was welcome to what he found—we were trespassers in his domain and he was entitled to some compensation.

We rolled our sleeping bags on the ground among the smoke trees in a wash that was as clean and unmarked as if we were the first humans ever to reach this spot. Recent rains had washed away all evidence of previous visitors.

And that is my idea of a perfect New Year party.

* * *

I wish that more of our people in the Southwest, especially those whose homes are in the cities, would find the opportunity for camping trips in the desert country. Crowded together in the metropolitan areas, folks acquire the notion that the world revolves around the petty activities of the human race.

Out in the silence of a secluded desert canyon where a New Year, or a thousand of them, matters little in the great plan of the universe the human actor becomes just another little ant on a big anthill.

It is a good thing to have our egos deflated once in a while—and much less painful to let old Mother Nature do the job in a perfectly natural manner than to have the operation performed by our associates in the business and social world.

* * *

*According to rumors drifting across the river from Arizona, Cartoonist Reg Manning of Phoenix is now preparing a Cartoon Guide to California similar to the Arizona guide book which proved so popular in his home state. This oughta be good—California through the eyes of a dyed-in-the-wool Arizonan.

My guess is that Reg's humor will capture the hearts of the Californians, just as it already has won the undying loyalty of the folks in his own native state. State lines are for politicians—they don't mean a thing to a man with Reg Manning's sense of humor.

* * *

The Southern California desert was drenched with rain in December—and according to all the signs there should be a colorful display of wildflowers before the end of March.

I can give expert testimony that the sand is moist to a depth of at least 18 inches—I had to dig my car out of it a couple of weeks ago. Oh, I'll admit that none but the dumbest of drivers will get bogged in damp sand. Of course I could offer a lot of excuses. The truth is that I have been stuck in the sand so many times I have become callous—and no longer regard it as a disgrace. Some of my travel companions even accuse me of doing it on purpose—just to show off my technique in digging 'er out.

* * *

Santa Claus was good to the Desert Magazine. We added nearly a thousand new and renewal subscriptions to our list during the period preceding Christmas—and the outlook for 1939 is very bright indeed. We're grateful for the interest and loyalty of all the good friends who have made this growth possible.

Today we have every state in the union on our subscription list. Mississippi was the last blank state on our circulation map—and then just before Christmas my old-time neighbor, Col. Eggleston of Calexico, came into the DM office and ordered the magazine sent to one of his friends down among the bayous, and that made it 100 percent. For that, I can forgive the colonel for all the verbal grenades he tossed in my direction during those political feuds of former days in my old home town on the border.

* * *

There's only one cloud on the editorial horizon for 1939. If the supreme court of the land, or some other all-powerful agency will determine once and for all whether to spell it Navajo or Navaho; Mojave or Mohave; Saguaro or Sahuaro; Piute, Paiute or Pahute—then my New Year will be filled with nothing but sunshine. In a magazine which has occasion to use these names many times every month of the year, the difference of opinion among the various authorities as to the proper spelling is most annoying.

While we are on the subject of spelling, Guy L. Fleming of the California Division of parks told me the other day that the name Borego as applied to the northern sector of the Anza Desert park is to be corrected to Borrego. The word is Spanish, meaning "sheep" and since the Spanish word has a double "r" the state park authorities have undertaken to re-establish the correct name.

Dear Mr.
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LETTERS

Fort Defiance, Arizona

Dear Mr. Henderson:

While reading your October Desert I ran into a rather glaring error in your Desert Place Names. This is under the heading of *Chuska*. You give the interpretation as "Sp. meaning literally 'pleasant, happy, merry.'"

Let me quote from Guide Book:

192. CHUSKA PEAK. Navajo. *Tch'oshg'ai*. (Also Flat Top Peak 1880, Choskai, 1882 USGS.) Navajo interpretation "White Spruce on the side of the Mountain." This peak with an elevation of near 9000 feet is a sacred mountain of the Navajos. Important in the Nightway Chant stories. A part of *Yoditzill*, "Bead Mountain" of which it is the head. The neck is the break at Washington Pass, the body, the Tunichia Mountains. The arms are the Crystal projection and the Shiprock trapdyke. The Lukachukai and Carrizo Mountains are the limbs of this sacred male figure.

The Navajo refused to allow the Indian Forest Service to build a fire tower on this prominent peak in 1935. Some 35 miles north of Gallup, N. M.

RICHARD VAN VALKENBURGH.

• • •

Tucson, Arizona

Dear Editor:

My work often makes it necessary for me to travel over the road from Yuma to Quartzsite. Every time I pass Castle Dome mountain I find myself wondering if the vertical walls of the dome can be climbed. Do you know whether anyone has ever reached the top, and how difficult it is?

WILLARD SMYTHE.

Yes, Castle Dome has been climbed many times. The route up the south side should be undertaken only by a party with rope and some knowledge of climbing technique. The north side can be scaled by anyone with ordinary climbing skill. Several years ago there was a cairn at the top containing a tin can in which every climber deposited a penny. To reach the north base take the old road from the Castle Dome postoffice north to the "Ladder Tanks" sign (it's a rough road). Park the car there and follow the arroyo east. Where the arroyo forks a few hundred yards from the road follow the left channel. — Editor.

Washington, D. C.

My dear Ed—:

It should be highly gratifying to the Desert Magazine to learn that you and others follow.

I enjoyed reading on the train, coming here, the very interesting article in your December issue about the Acoma Indians of New Mexico and their Enchanted Mesa. I was surprised to find that the leading Washington newspaper, the Star today featured the same subject in its photogravure section, I enclose the pictures and the Star's version of the legend that "an electric storm is supposed to have destroyed the only ascent to the colony on the towering 434-foot mesa. Those who remained in their homes died of starvation while the fortunate ones working below lived to build new homes." I prefer the way you told the story.

Keep up the good work and the desert is bound to become as well known and as well beloved in the East as in the West.

PHIL D. SWING.

• • •

Deep Well Ranch,
Palm Springs, California

Dear Sir:

Your request in a recent issue for recipes of desert dishes prompts me to send my version of how to prepare a diamondback rattler, which I think will meet the approval of a majority of your readers.

First, select the snake best suited to the number of people to be served. Then milk it, setting the venom aside to be used later as sauce. Perhaps I should explain that this is to be a planked snake—a dish highly appreciated by connoisseurs of good food throughout the civilized world.

Then broil your snake rare, medium or well done as you prefer. Then get ready to place your delicacy on the plank, but not until you have poured the venom over the meat. Now that it is ready to serve garnish it with anything that suits your fancy—sage, cactus or greasewood, anything you have handy.

And now that you are ready to partake of your meal, just throw away the snake and eat the plank. It won't be so damaging to your health.


CHUCK WAGON CHARLEY.

For specific directions as to the approved method of "milking" the venom from a rattlesnake see Desert Magazine issue of December, 1937.

—Editor.

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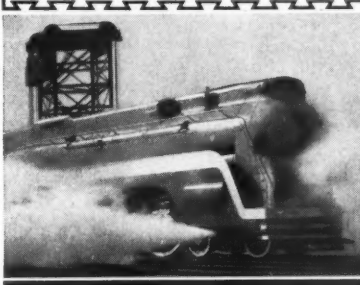
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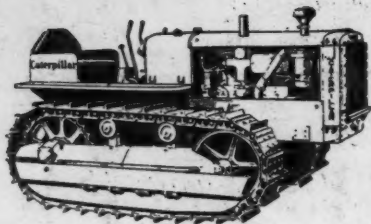
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The buyer is kept in friendly contact by adequate and prompt service rendered in supplying parts or the quick response of a service man into the field to overcome the occasional problems which arise with the layman operator.

Unable to acquire a new "Caterpillar" 22, we were content to purchase a reconditioned machine at a saving of over \$500 and in practice found the equipment adequate to the representations made as to capacity and draw-bar efficiency, and perhaps, more to the point, maintaining the exact fuel and lubrication consumption indicated in the sales talk. Our operator was happier than a kid with a Christmas toy during his first week of tracting and praised its low fuel consumption, its ready response and its adaptability in circling around the pecan trees which must be so carefully protected when working the ground for intercrops.

We do not know if your other agencies are conducted in the same manner as that of your Yuma dealer, but if so, no tiller of the soil will go wrong when he buys either reconditioned or new "Caterpillars".

Sincerely yours,

W. H. Buehman

Creswell Properties
Yuma, Arizona

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EL CENTRO — BRAWLEY — YUMA

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